

ATTACHMENT G

WINTER HAVEN



925B Peachtree Street NE STE. 710
Atlanta, Georgia 30309

June 9, 2016

City of Winter Haven
Engineering Department
Attn: Keri Sorensen
Attn: Sean Byers
490 Third Street NW
Winter Haven, FL 323880

RE: Mobilitie LLC Right of Way Permit Application (9FLB00004615, 9FLB004614, 9FLB004612, 9FLX002227, 9FLX002226, and 9FLX002223)

Dear Ms. Sorensen:

Please find the enclosed Mobilitie, LLC Permit Applications for six (6) new proposed utility infrastructure facilities in the City of Winter Haven. Along with the attached permit applications, you will also find construction drawings and photo simulations for each facility. I have had the pleasure of previously meeting with Mr. Sean Byers about a previous permit application. Mobilitie, LLC understands that our project proposal is currently under consideration by your City. We would like to schedule another meeting with you, Mr. Byers, and anyone else who would like to attend to provide any additional information that is needed.

As we mentioned to the City in our previous letter, Mobilitie, LLC is a public utility company regulated by the Florida Public Service Commission to provide telephone related services, such as facilities based competitive local exchange and interexchange services. To meet the growing demand for connectivity, Mobilitie LLC is deploying a hybrid transport network that provides high-speed, high-capacity bandwidth in order to facilitate the next generation of devices and data-driven services. This network can support a variety of technologies and services that require connectivity to the internet, including, but not limited to, driverless and connected vehicles (commercial, personal and agricultural), remote weather stations and mobile service providers. These transport utility poles and facilities are not dedicated to any particular customer, and, to the extent capacity on the structures is available, are available to be used by other entities, including the City of Winter Haven. Mobilitie LLC's hybrid transport network is an industry changing approach that seeks to improve backhaul connectivity for the City's residents.

Mobilitie, LLC plans to construct the applied for utility infrastructures within the next 18 months. We are excited and hope to work with the City of Winter Haven and I invite you to call me with any questions or comments you may have. My phone number is 727-512-5599. Also, please feel free to reach out to Michele Visconti, the Network Real Estate Specialist handling this market at 470-240-3222, or her cell phone 239-249-2472.

Thank you for your attention to this matter.

Respectfully submitted,

Mike Nuckols
Permitting Manager

*Enclosures

CITY OF WINTER HAVEN

Engineering Services Division
490 3rd Street N.W. 33881
Phone 863-291-5851

9FLX002226

USE PERMIT

Street Name Lake Shipp Dr. Date June 9, 2016
 Located between Lake Shipp Dr., Street and Ave Q SW Street
 Permission Granted to Mobilitie, LLC Phone number - 727-512-5599
 For construction and maintenance of End user proposes to install a 120' new pole within an existing ROW.
Scope of work: Install a new pole with proposed backhaul transport equipment.

This permit is subject to the following conditions:

1. The construction and maintenance of such utility shall not interfere with the property and the rights of a prior occupant.
2. All work shall be done in keeping with standards established by the Engineering Services Director and under the supervision of Mike Foster, City Construction Inspector, Phone (863) 291-5850, Cell (863) 287-2727.
3. All material and equipment shall be subject to inspection by a representative of the Engineering Services Director.
4. Construction shall be performed in a safe manner and in accordance with the regulations of OSHA, USDA and other applicable agencies. The City shall be relieved of all responsibilities for damages of any nature arising from this permit. Subject to the above terms and conditions, the permittee shall take such safety measures, including placing and display of caution signs, as good practice dictates in conduct of construction and maintenance work herein described.
5. The permittee shall provide for safe pedestrian traffic throughout the construction time. Where existing sidewalks and other walkways exist prior to this work, they or safe alternate trafficable ways, shall be maintained.
6. All city property shall be restored to its original condition to the satisfaction of the Engineering Services Director and/ or his authorized representative.
7. The applicant shall indemnify, defend, and hold harmless the City from and against any and all claims, suits, actions, judgments, demands, taxes, losses, costs, expenses, damages, and liability caused by, resulting from, or arising out of the negligent acts, errors, or omissions of the applicant, its officers, employees, agents, or representatives that may occur by reason of this construction.
8. The attached sketch covering details of this construction shall be made a part of this permit.
9. The applicant, at a minimum, shall obtain insurance coverage for specific risks and in such amounts and with insurers as determined acceptable by the City. Any such insurance coverage(s) required by the City shall represent the minimum amount of coverage required. The applicant, at its sole cost, shall obtain insurance coverage(s) as follows:
 - a. Workers' Compensation/Employer's Liability:
 - For each accident (\$5,000,000.00)
 - Disease – Policy Limit (\$5,000,000.00)
 - Disease – Each Employee (\$5,000,000.00)
 - b. Commercial General Liability ("CGL"):
 - For each occurrence (\$5,000,000.00)
 - General Aggregate (\$5,000,000.00)
 - Products/Completed Operations Aggregate (\$5,000,000.00)
 - Personal and Advertising Injury (\$5,000,000.00)
 - c. Business Automobile Policy:
 - Each occurrence and bodily injury and property damage liability combined (\$5,000,000.00)
10. It is expressly stipulated that this permit is a license for permissive use only and that placing of facility upon public property pursuant to this permit shall not operate to create or to vest any property in the permittee or his client.

Pursuant to section 337.403(1), Florida statutes, whenever necessary for the construction, repair, improvement maintenance, safe and efficient operation, alteration or relocation of all, or any portion of said Transportation Facility/City Property as determined by the Engineering Services Director, any or all utilities and appurtenances authorized here under or any shall be immediately removed from said Transportation Facility/City Property or reset or relocate thereon as requested by the Engineering Services Director and at the expense of the Permittee.

11. The permittee shall commence actual construction in good faith on TBD and shall complete the construction within 7 days. This permit shall be void if the work is not started within sixty (60) days from date of said permit.
12. Applicant declares that prior to filling out the application he has ascertained the location of all existing utilities, both aerial and underground. Applicant also declares that all other utilities within the area were notified and that he is including a notification copy with this permit application. List the name of the Utility, Date, and the authorized Contact person from each Utility that were contacted: Mobilite, LLC will send all required utility notification letters, and proof of such notification, when Mobilite's project to install utility poles within the City's rights-of-way has been approved by the City.
13. Notify the Engineering Services Division (863) 291-5851 a minimum of 48 hours prior to the commencement of construction. A SUNSHINE ONE number must be provided at this time. Failure to provide proper notification may result in the stoppage of work. **Notify the Engineering Services Division the day construction actually commences.**
14. If the applicant transfers or assigns its assets located within the City's right-of-way, the transferee or assignee shall be obligated to comply with the terms of this Use Permit and any and all applicable provisions of the WHC.
15. Nothing herein is intended to waive the City's sovereign immunity or the limits of its liability under Section 768.28 of the Florida Statutes regardless of whether such claims are based on contract, statute, tort, strict liability, product liability, negligence or otherwise.
16. **The use of missiles is limited and must be approved by the Engineering Services Director prior to Construction.**

Approved by: _____
(Engineering Services Director)

Submitted by: Michael Nuckols
(Applicant's Signature)

Date: _____

Michael Nuckols
(Applicant's name printed)

SUNSHINE ONE# _____

City of Winter Haven Engineering Services Division Permit # _____

Note: Attach Applicable Plans as Required



Winter Haven, FL 33880

[illegible]



NOTE: THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY PINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED.

NOTE:
PROPOSED 120'0" POLE IN THE R.O.W.
R.O.W. BOUNDARIES TO BE CONFIRMED AFTER
SURVEY

FL Network Transport,
LLC

PROJECT NUMBER: 07X00228A

DRAWN BY:

CHECKED BY:

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS COULANT.

STYRENE

28.004937,-81.751479
Winter Haven, FL 33880

UTILITY POLE

QUESTIONS

EXHIBIT PHOTO &
ENLARGED SITE PLAN

SHEET NUMBER

10



ONE LINE DIAGRAM

CITY OF WINTER HAVEN

Engineering Services Division
490 3rd Street N.W. 33881
Phone 863-291-5851

9FLX002227

USE PERMIT

Street Name Post Ave SW Date June 9, 2016
 Located between 2nd Street SW, Street and 1st Street South Street
 Permission Granted to Mobilite, LLC Phone number - 727-512-5599
 For construction and maintenance of End user proposes to install a 120' new pole within an existing ROW.
Scope of work: Install a new pole with proposed backhaul transport equipment.

This permit is subject to the following conditions:

1. The construction and maintenance of such utility shall not interfere with the property and the rights of a prior occupant.
2. All work shall be done in keeping with standards established by the Engineering Services Director and under the supervision of Mike Foster, City Construction Inspector, Phone (863) 291-5850, Cell (863) 287-2727.
3. All material and equipment shall be subject to inspection by a representative of the Engineering Services Director.
4. Construction shall be performed in a safe manner and in accordance with the regulations of OSHA, USDA and other applicable agencies. The City shall be relieved of all responsibilities for damages of any nature arising from this permit. Subject to the above terms and conditions, the permittee shall take such safety measures, including placing and display of caution signs, as good practice dictates in conduct of construction and maintenance work herein described.
5. The permittee shall provide for safe pedestrian traffic throughout the construction time. Where existing sidewalks and other walkways exist prior to this work, they or safe alternate trafficable ways, shall be maintained.
6. All city property shall be restored to its original condition to the satisfaction of the Engineering Services Director and/ or his authorized representative.
7. The applicant shall indemnify, defend, and hold harmless the City from and against any and all claims, suits, actions, judgments, demands, taxes, losses, costs, expenses, damages, and liability caused by, resulting from, or arising out of the negligent acts, errors, or omissions of the applicant, its officers, employees, agents, or representatives that may occur by reason of this construction.
8. The attached sketch covering details of this construction shall be made a part of this permit.
9. The applicant, at a minimum, shall obtain insurance coverage for specific risks and in such amounts and with insurers as determined acceptable by the City. Any such insurance coverage(s) required by the City shall represent the minimum amount of coverage required. The applicant, at its sole cost, shall obtain insurance coverage(s) as follows:
 - a. Workers' Compensation/Employer's Liability:

• For each accident	(\$5,000,000.00)
• Disease – Policy Limit	(\$5,000,000.00)
• Disease – Each Employee	(\$5,000,000.00)
 - b. Commercial General Liability ("CGL"):

• For each occurrence	(\$5,000,000.00)
• General Aggregate	(\$5,000,000.00)
• Products/Completed Operations Aggregate	(\$5,000,000.00)
• Personal and Advertising Injury	(\$5,000,000.00)
 - c. Business Automobile Policy:

• Each occurrence and bodily injury and property damage liability combined	(\$5,000,000.00)
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10. It is expressly stipulated that this permit is a license for permissive use only and that placing of facility upon public property pursuant to this permit shall not operate to create or to vest any property in the permittee or his client.

Pursuant to section 337.403(1), Florida statutes, whenever necessary for the construction, repair, improvement maintenance, safe and efficient operation, alteration or relocation of all, or any portion of said Transportation Facility/City Property as determined by the Engineering Services Director, any or all utilities and appurtenances authorized here under or any shall be immediately removed from said Transportation Facility/City Property or reset or relocate thereon as requested by the Engineering Services Director and at the expense of the Permittee.

11. The permittee shall commence actual construction in good faith on TBD and shall complete the construction within 7 days. This permit shall be void if the work is not started within sixty (60) days from date of said permit.
12. Applicant declares that prior to filling out the application he has ascertained the location of all existing utilities, both aerial and underground. Applicant also declares that all other utilities within the area were notified and that he is including a notification copy with this permit application. List the name of the Utility, Date, and the authorized Contact person from each Utility that were contacted: Mobilite, LLC will send all required utility notification letters, and proof of such notification, when Mobilite's project to install utility poles within the City's rights-of-way has been approved by the City.
13. Notify the Engineering Services Division (863) 291-5851 a minimum of 48 hours prior to the commencement of construction. A SUNSHINE ONE number must be provided at this time. Failure to provide proper notification may result in the stoppage of work. **Notify the Engineering Services Division the day construction actually commences.**
14. If the applicant transfers or assigns its assets located within the City's right-of-way, the transferee or assignee shall be obligated to comply with the terms of this Use Permit and any and all applicable provisions of the WHC.
15. Nothing herein is intended to waive the City's sovereign immunity or the limits of its liability under Section 768.28 of the Florida Statutes regardless of whether such claims are based on contract, statute, tort, strict liability, product liability, negligence or otherwise.
16. **The use of missiles is limited and must be approved by the Engineering Services Director prior to Construction.**

Approved by: _____
(Engineering Services Director)

Submitted by: Michael Nuckols
(Applicant's Signature)

Date: _____

Michael Nuckols
(Applicant's name printed)

SUNSHINE ONE# _____

City of Winter Haven Engineering Services Division Permit # _____

Note: Attach Applicable Plans as Required



CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

The aerial map shows a study area with a 'Pond' (blue) and a 'Road' (yellow). A red dot marks the 'SITE' location. The map includes a grid of streets and a scale bar indicating distances of 0 to 100 meters.

TITLE SHEET

0.0



① EXHIBIT PHOTO - GENERIC (NOT SITE SPECIFIC)
SCALE: N.T.S.



② AERIAL SITE LOCATION
SCALE: N.T.S.



NOTE: THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY PINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED.

NOTE: PROPOSED 120'0" POLE IN THE R.O.W.
R.O.W. BOUNDARIES TO BE CONFIRMED AFTER
SURVEY



2 ENLARGED SITE PLAN
SCALE: N.T.S.

FL Network Transport,
LLC

PROJECT NUMBER	DET Y002277A
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4866 J. Neurosci., July 26, 2006 • 26(30):4860–4866

NUMBER OF

[illegible]

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL

SEE INFORMATION

05 Y00000000

28.005889, -81.727988
Winter Haven, FL 33880
SFCA00ZZZ1A

28.005889, -81.727988
Winter Haven, FL 33880

UTILITY POINT

SUBJECT TITLE

EXHIBIT PHOTO &
ENLARGED SITE PLAN

SHEET NUMBER

1.0



1 FRONT UTILITY POLE ELEVATION
SCALE: 0.010399

ONE LINE DIAGRAM

CITY OF WINTER HAVEN

Engineering Services Division
490 3rd Street N.W. 33881
Phone 863-291-5851

Sheet 1 of 2

9FLB004615

USE PERMIT

Street Name Corner of Ave H NE & 10th St. NE Date June 9, 2016
Located between 10th Street NE, Street and 9th Street NE Street
Permission Granted to Mobilite, LLC Phone number - 727-512-5599
For construction and maintenance of End user proposes to install equipment on a new pole within an existing ROW.
Scope of work: Install a new pole with proposed backhaul transport equipment.

This permit is subject to the following conditions:

1. The construction and maintenance of such utility shall not interfere with the property and the rights of a prior occupant.
2. All work shall be done in keeping with standards established by the Engineering Services Director and under the supervision of Mike Foster, City Construction Inspector, Phone (863) 291-5850, Cell (863) 287-2727.
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• Disease – Policy Limit	(\$5,000,000.00)
• Disease – Each Employee	(\$5,000,000.00)
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• For each occurrence	(\$5,000,000.00)
• General Aggregate	(\$5,000,000.00)
• Products/Completed Operations Aggregate	(\$5,000,000.00)
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16. **The use of missiles is limited and must be approved by the Engineering Services Director prior to Construction.**

Approved by: _____
(Engineering Services Director)

Submitted by: Michael Nuckols
(Applicant's Signature)

Date: _____

Michael Nuckols
(Applicant's name printed)

SUNSHINE ONE# _____

City of Winter Haven Engineering Services Division Permit # _____

Note: Attach Applicable Plans as Required

mobilitie
an Agency for Mobility
 9258 PEACHTREE ST. NE,
 SUITE 710
 ATLANTA, GA 30309
 PHONE: (312) 638-5400



PROJECT NO:	ER600201
DRAWN BY:	A. AZUCENA
CHECKED BY:	S. BO

[illegible]

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNDER THE AGE OF TWENTY-ONE, TO SIGN OR SIGNATURE TO ALTER THIS DOCUMENT

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL 33881
LIGHT POLE

TITLE SHEET

SHEET NUMBER
0.0

DIG ALERT

**Know what's below.
Call before you dig.**

811

TWO WORKING DAYS BEFORE YOU DIG

PROJECT DESCRIPTION
<p>END USER PROPOSES TO INSTALL EQUIPMENT ON AN EXISTING WOOD LIGHT POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:</p> <ul style="list-style-type: none"> - INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON AN EXISTING WOOD LIGHT POLE

CODES
2015 INTERNATIONAL BUILDING CODE 2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX	
SHEET NO:	SHEET TITLE
0.0	TITLE SHEET
1.0	SITE PLAN & EXHIBIT PHOTO
2.0	POLE ELEVATIONS
2.1	POLE ELEVATIONS
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	ANTENNA & EQUIPMENT DETAILS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
6.0	TRAFFIC CONTROL PLAN
6.1	TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

ARCHITECT/ENGINEER

JACOBS ENGINEERING GROUP, INC.
5449 BELLS FERRY ROAD
ACWORTH, GA 30102
CONTACT: KARL KRATINA
PROJECT MANAGER
TEL: (878) 480-1418
FAX: (770) 701-2501

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

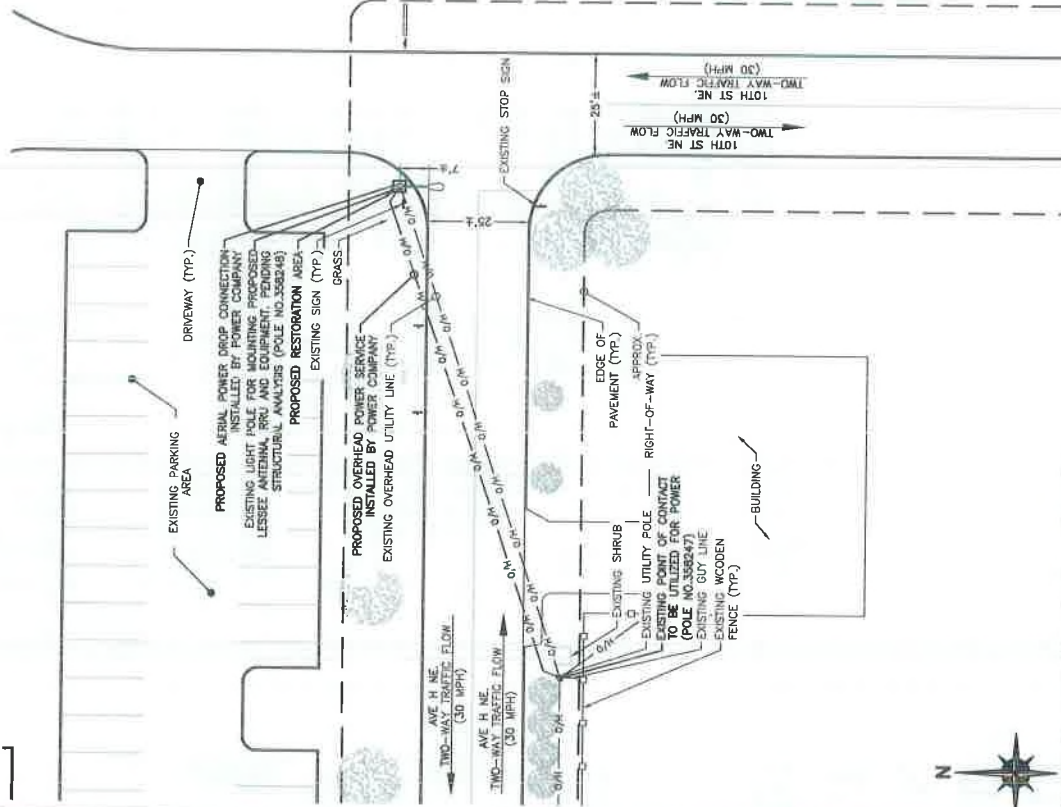
SITE INFORMATION	
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS ST:	AVE H NE & 10TH ST NE
APPLICANT:	MOBILE, LLC
APPLICANT ADDRESS:	925B PEACHTREE ST. NE, SUITE 710 ATLANTA, GA 30319 PHONE: (312) 838-5400
LATITUDE:	28° 1' 48.93" N (28.030257)
LONGITUDE:	81° 42' 45.62" W (-81.712872)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 152' AMSL
COUNTY:	POLK COUNTY
JURISDICTION:	CITY OF WINTER HAVEN

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

The figure consists of two maps. The top map shows a larger area with several lakes (Lake Superior, Lake Superior, Lake Superior) and a road network. A black dot marks the 'SITE' near Lake Superior College. The bottom map is a closer view of the site, showing the intersection of W Lake Street NE and 10th St NE. A black dot marks the 'SITE' near the intersection. A legend in the bottom left of the bottom map identifies 'High State College' and 'State of Lakes College'.

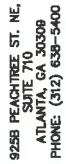
MAP DATA © 2015 GOOGLE

MAP DATA © 2015 GOOGLE



NOTE: THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

[illegible]



NOTE: PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

7' OF PROPOSED ANTENNA = $\pm 30'-4"$
 6' OF PROPOSED ANTENNA = $\pm 28'-10"$
 1' OF EXISTING POLE = $\pm 28'-6"$
 EXISTING UTILITY LINE
 6' OF PROPOSED RF FILTER = $\pm 21'-6"$
 6' OF PROPOSED UE RELAY = $\pm 17'-6"$
 6' OF PROPOSED RADIO HEAD = $\pm 15'-0"$
 6' OF PROPOSED BACKHAUL ENCLOSURE = $\pm 12'-6"$
 6' OF PROPOSED AC DISTRIBUTION BOX = $\pm 11'-0"$
 BOTTOM OF PROPOSED METER = $\pm 7'-6"$
 PROPOSED OMNI-DIRECTIONAL ANTENNA TO BE INSTALLED
 EXISTING STREET LIGHT
 PROPOSED RF FILTER (WHERE REQUIRED) TO BE MOUNTED WITH THROUGH BOLT ATTACHMENT
 PROPOSED WEATHER HEAD FOR NEW OVERHEAD UTILITY
 PROPOSED POWER CONDUIT & WIRE PER CODE, SIZE TBD
 PROPOSED UE RELAY MOUNTED WITH THROUGH BOLT ATTACHMENT
 PROPOSED GPS ANTENNA ATTACHED TO RADIO HEAD WITH MIN. 6" SEPARATION
 PROPOSED RADIO HEAD MOUNTED WITH THROUGH BOLT ATTACHMENT
 PROPOSED SURGE PROTECTOR MOUNTED WITH THROUGH BOLT ATTACHMENT
 PROPOSED BACKHAUL MODem ENCLOSURE (WHERE REQUIRED) MOUNTED WITH THROUGH BOLT ATTACHMENT
 PROPOSED AC POWER DISTRIBUTION BOX MOUNTED WITH THROUGH BOLT ATTACHMENT
 PROPOSED 100A METER/DISCONNECT MOUNTED WITH THROUGH BOLT ATTACHMENT
 EXISTING CLASS 3 OR CLASS 4 WOOD POLE
 GRADE
 EXISTING POLE EMBEDMENT

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m³)

BAND 41 (2500MHz) EQUIPMENT CHART		
QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD) WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.7" DIAMETER 11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.8" 55.1 LBS
1	GPS ANTENNA	0.8" X 2.5" DIAMETER 0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.91" 14 LBS
1	RECTIFIER FILTER	13.6" X 6.1" X 2.4" 7.7 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER 9.8 LBS

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, TO OBTAIN OR ATTEMPT TO OBTAIN A LICENSE BY ANY MEANS OTHER THAN THE EXAMINATION PROCESS.

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL
LIGHT POLE

SHEET TITLE

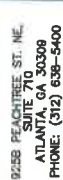
POLE ELEVATIONS

SHEET NUMBER

2.0

PROPOSED FRONT POLE ELEVATIONS

SCALE: 1" = 5'

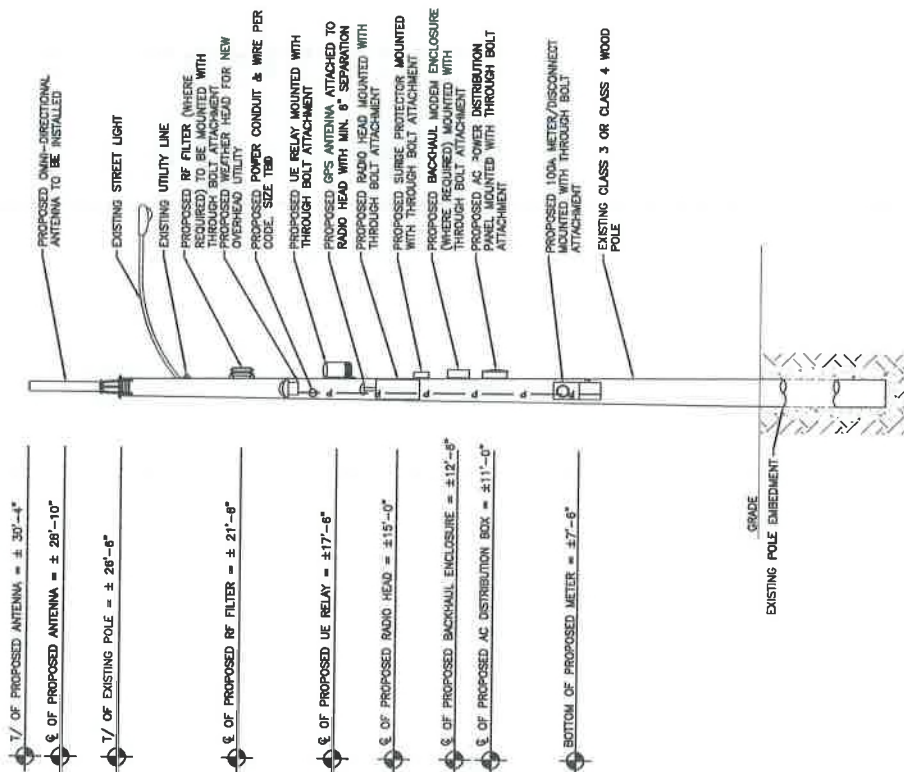


NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKSILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D693. ADDITIONALLY, STRUCTURAL BACKSILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (160k/m³)

BAND 41 (2500MHz) EQUIPMENT CHART			
QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	DISCREET ANTENNA	35.4" X 4.3" DIAMETER	11 LBS
1	MOUNTED BAND	20.1" X 11" 8.9"	55.1 LBS
1	GPS ANTENNA	0.6" X 2.6" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	13.6" X 8.5 X 5.61"	14 LBS
1	RECTIFIER FILTER	13.6" X 8.5 X 2.4"	7.7 LBS
1	MOUNTED RELAY	13.6" X 7.8" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	13.6" X 7.8" DIAMETER	9.9 LBS

**PROPOSED SIDE POLE ELEVATION**

SCALE: 1" = 5'

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.1

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL
LIGHT POLE

[illegible]

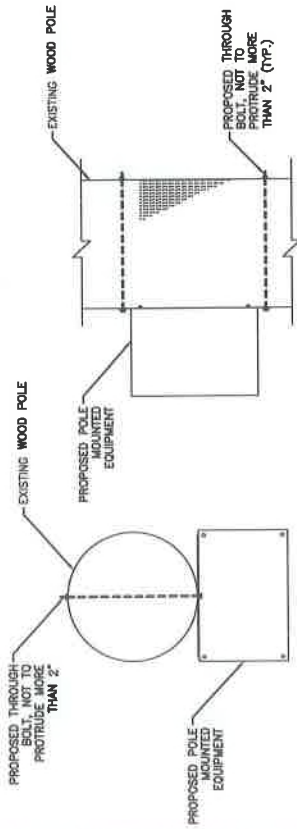
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL NURSING, TO ATTEMPT TO SIGN THIS DOCUMENT.

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL
LIGHT POLE

SHEET TITLE
ANTENNA & EQUIPMENT
MOUNTING DETAILS

3.0

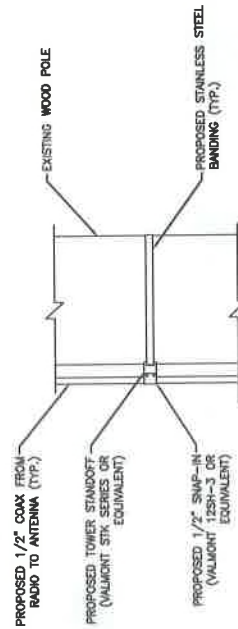


TOP VIEW

SIDE VIEW

EQUIPMENT MOUNTING DETAIL

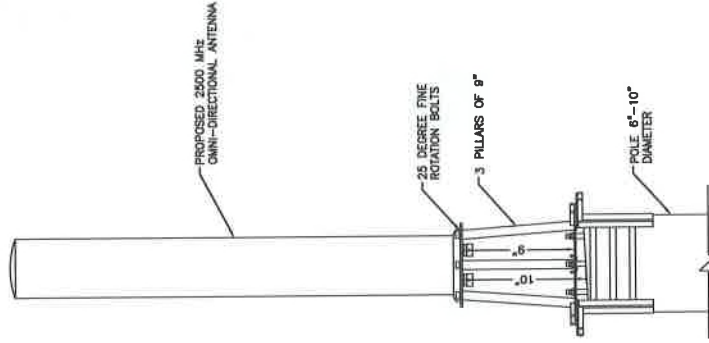
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NOTE: SPACE SNAPS PER CABLE MANUFACTURER'S SPECIFICATIONS

CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE



SIDE VIEW

NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 6" TO 10" DIAMETER.
2. MOUNTING BRACKET MAY BE USED FOR WOOD, CONCRETE & STEEL POLES.
3. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION.

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3

925B PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 838-5400

PROJECT NO.:

DRAWN BY:

RECEIVED

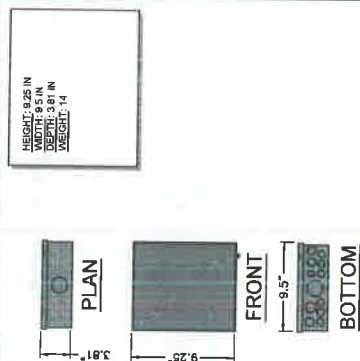
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY
DRIVER, UNLESS THEY ARE ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL,
INSTRUCT TO ALTER THIS DOCUMENT.

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL 33908
LIGHT POLE

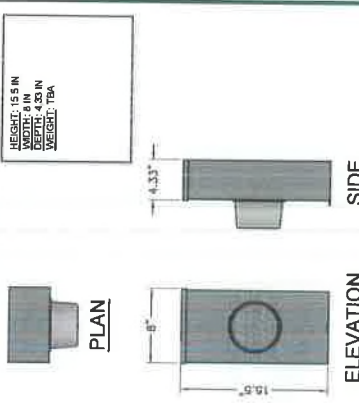
SHEET TITLE	
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SET NUMBER



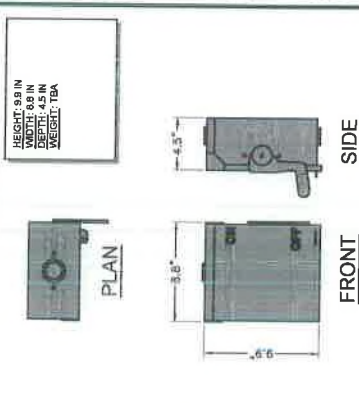
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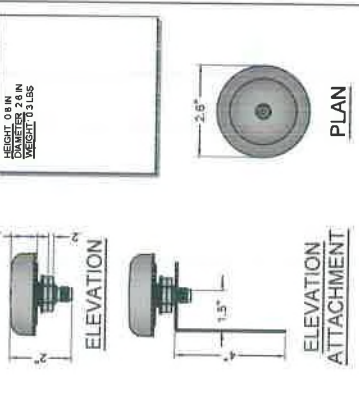
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U.S. 71



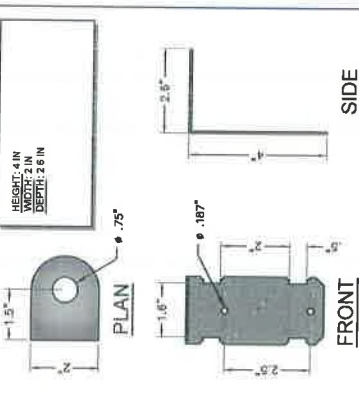
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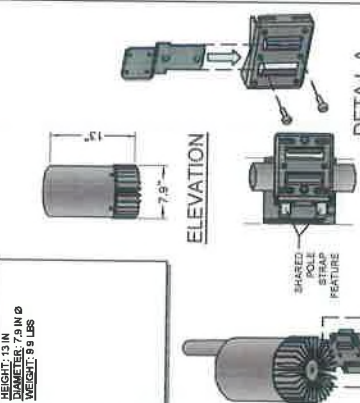
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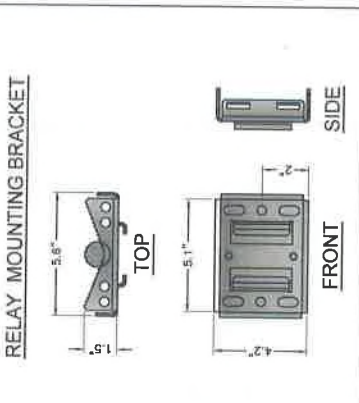
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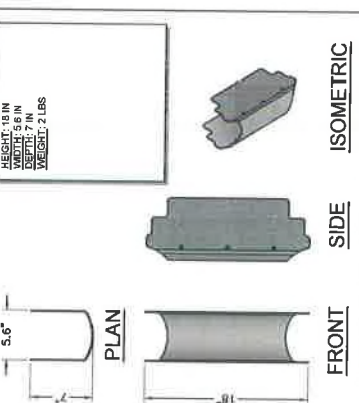
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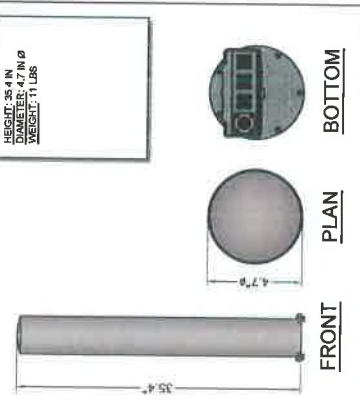


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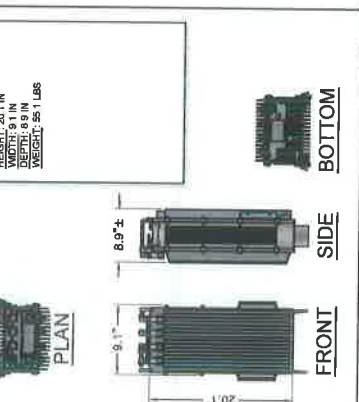
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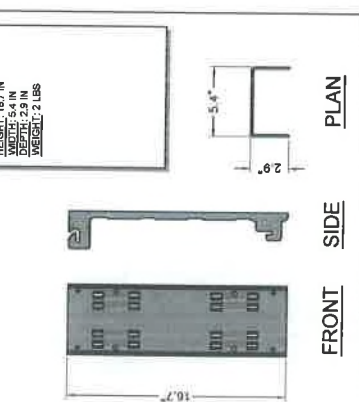


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1

UTILITY NOTES:

- WORK INCLUDES:
1. THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR. OF ALL LABOR, MATERIALS, AND EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISIONS AND INSTALLATIONS. THIS UTILITY, SITE, AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
 1. THE PROVISIONS, INSTALLATION AND CONNECTIONS OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
 2. THE PROVISIONS, INSTALLATION AND CONNECTIONS OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
 3. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE.
 4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE EQUIPMENT, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT.
 5. ALL CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
 6. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, FEES, INSPECTIONS AND APPROVALS SHALL BE SECURED BY THE CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:
- N.E.C. NATIONAL ELECTRICAL CODE
- A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
- I.E.E.E. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
- A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS
- N.E.M.A. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

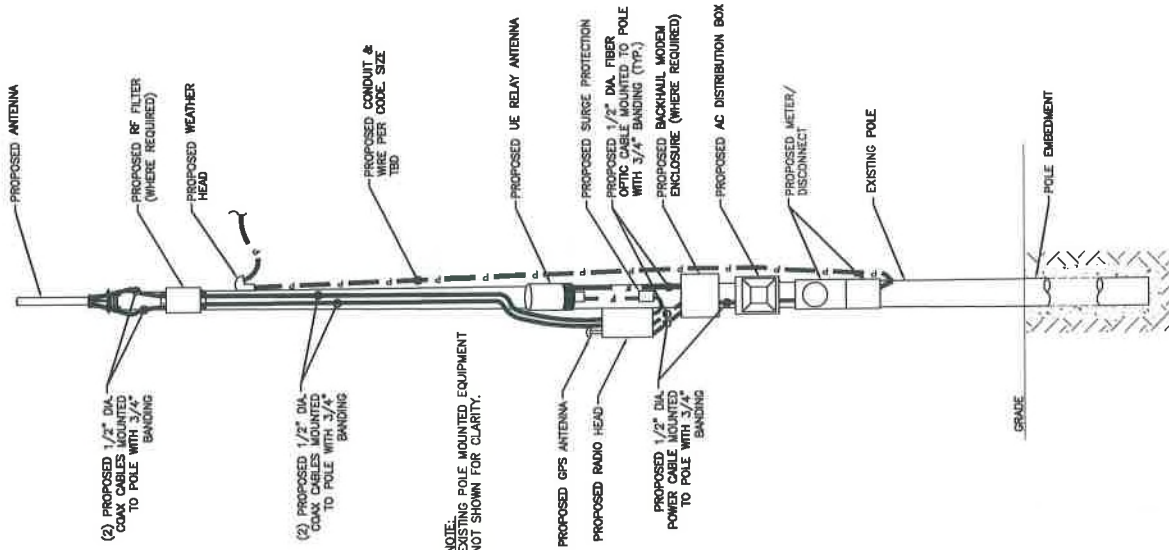
1. WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THIN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
3. RACEWAYS SHALL BE GALVANIZED STEEL SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH FIBER RACEWAY AND WIRING INSTALLATION PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

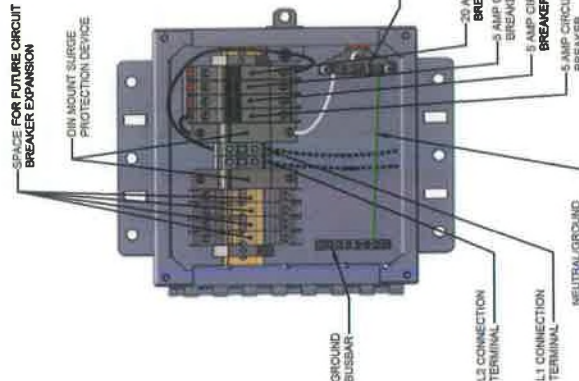
GENERAL NOTES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, CHECK ARCHITECTURAL, STRUCTURAL AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO THE ARCHITECT/ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND WIRING OF ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAM AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

COORDINATION WITH UTILITY COMPANY: THE CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY.



NOTE: CABLE ROUTE AND TERMINATION ONLY. CONTRACTOR SHALL INSTALL CABLES WITH MINIMUM 18\"/>



CABLING DIAGRAM

SCALE: NOT TO SCALE

mobilitie
Infrastructure Solutions

9258 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO: ER60201
DRAWN BY: A. AZUCENA
CHECKED BY: S. BO

NO.	REVISION	DATE
1	ISSUED FOR REVIEW	
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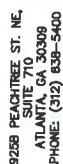
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, FIRM OR COMPANY TO REPRODUCE, COPIY, OR TRANSMIT THIS DOCUMENT TO ANY OTHER PERSON.

TABOXSDOKA
9FLB004615
SAILBOAT
AVE H NE &
10TH ST NE
WINTER HAVEN, FL 33881
LIGHT POLE

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
4.0



PROJECT NO:	ER600201
DRAWN BY:	A AZUCENA
CHECKED BY:	S BO

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PRELIMINARY

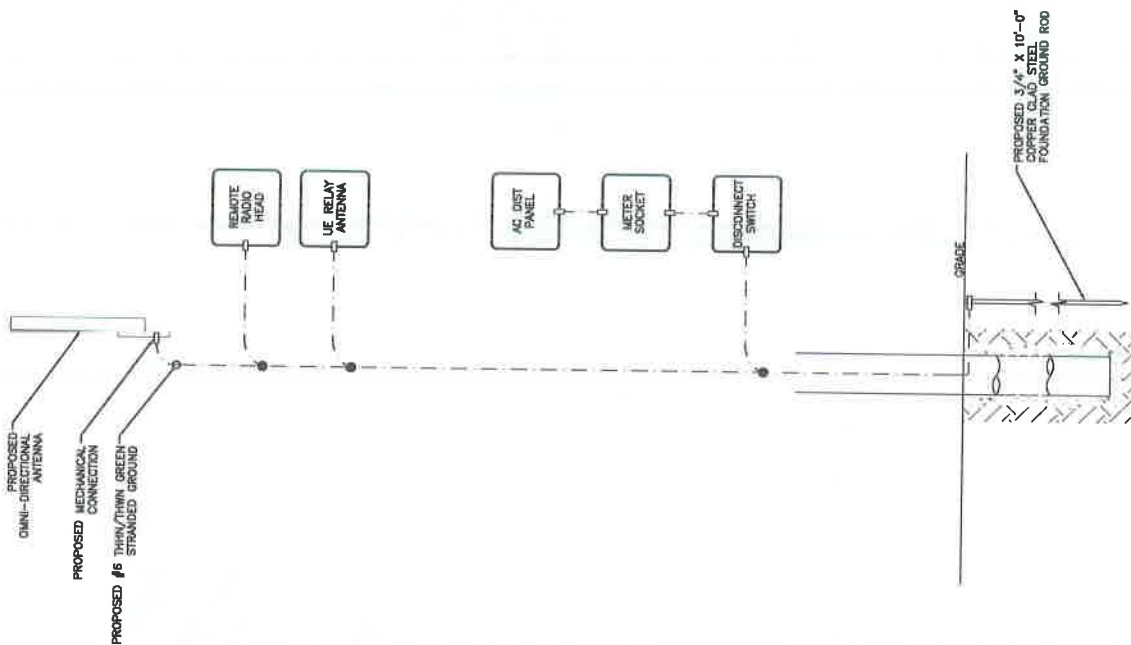
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL 33908
LIGHT POLE




SHEET TITLE

GROUNDING DETAILS

5.0



LEGEND

	CADWELD CONNECTION
	MECHANICAL CONNECTION
	COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC
PURPOSES ONLY. SEE ELEVATION
DRAWING FOR EQUIPMENT AND
ANTENNA LOCATIONS.

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

PART 1 - GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH-UP PAINTING, TOUCH UP AND OVERLAP REPAIR AND RESTORE MARRED EXPOSED FINISHES.

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.

- A. CLEAN UP THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREA, RUBBERB, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES, SHEEP PAVED, FOREIGN DEPOSITS, BARE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
- B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE PROJECT SITE.
- C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
- D. CLEAN EXPOSED EXTERIOR HARD SURFACED FINISHES TO A DIRT-FREE CONDITION, REMOVE TEMPORARY PROTECTIVE SUBSTANCES, AVOID DISTURBING NEIGHBORHOOD WEATHERING OF EXTERIOR SURFACES.
- E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING HANDBOLES, MANHOLES, AND SIMILAR SPACES.
- F. REMOVE METALS AND NON-PERMANENT LABELS.
- G. REMOVE AND REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES, REPLACE FINISHES AND SURFACES THAT CANNOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION, DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING REMOVAL OF THE CONSTRUCTION PERIOD.
- H. LEAST OFF ALL EQUIPMENT AND ITEMS WITHIN EQUIPMENT ENCLOSURE.
- I. REMOVE OR PROTECTING REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING THE CONSTRUCTION PERIOD.

PART 1 - GENERAL

1. WORK INCLUDED: SEE SITE PLAN DESCRIPTIONS. IF APPLICABLE, LEASE AREA AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
2. QUALITY ASSURANCE
A. FERTILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
3. SEQUENCING AND SCHEDULING
A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
B. CONSTRUCT TEMPORARY CONSTRUCTION AREA DESIGNATED AREA TO BE APPROVED BY THE CITY ENGINEER.
C. APPLY SOIL STABILIZER PRIOR TO PLACING BASE MATERIALS.
D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION. WORK TO ENSURE GROWTH OF VEGETATION.
E. APPLY TOPSOIL APPLICATIONS OF FINAL SURFACE, APPLY SOIL STABILIZER TO STONE SURFACES.

BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD

1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
3. LANDSCAPING WARRANTY STATEMENT

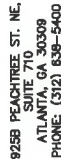
- A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND BUREAU OFFICES.
- B. IMMEDIATELY UPON NOTIFICATION OF DAMAGE, THE CONTRACTOR SHALL SUBMIT A PROTECTION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
- C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
- D. IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

1. MATERIALS

- TOTAL WILL**
PRODUCT 910
EPA 10282-7
(313) 583-8000
AMBIUSH HERBICIDE
EPA REGISTERED
(800) 526-4924
- PHASAR CORPORATION**
P.O. BOX 5123
DEARBORN, MI 48128
- FRAMAR INDUSTRIAL PRODUCTS**
1435 MORRIS AVE.
UNION, NJ 07083
- B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) - ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY MATERIALS SPECIFICATIONS.**
- C. STABILIZER FABRIC SHALL BE MIMAT 5002.**

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION

- A. CLEAR BRUSH AND DEBRIS FROM LEASE AREA AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
 - B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN OFF-SITE AREA AND WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF THE SAME.
 - C. WHERE UNDESIRABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
- A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LEASE AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
 - B. PLACE FILL OR STONE IN SIX (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
 - C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE AREAS. OTHER SPECIAL CONSIDERATIONS WHICH WILL ENCOURAGE ROOTING, TAKE AREAS TO BE SEED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
 - E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCE.
 - F. POINT OF RELEASE FROM THE CONTRACT, CONTINUE TO REWORK THE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND RECOMPACTED TO THE CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
- A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES. STAKE AND TIE DOWN AS REQUIRED TO PREVENT WIND OR WATER DAMAGE.
 - B. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN EXCAVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL LOGS TO THE EXISTING RAIL LINE. THE LOGS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS. METHODS SHALL CONFORM TO APPLICABLE EROSION CONTROL REQUIREMENTS.



PROJECT NO:	ER600201
DRAWN BY:	A. AZUCENA
CHECKED BY:	S BO

A		B		C		D		E		F		G		H		I		J		K		L		M		N		O		P		Q		R		S		T		U		V		W		X		Y		Z		AA		AB		AC		AD		AE		AF		AG		AH		AI		AJ		AK		AL		AM		AN		AO		AP		AQ		AR		AS		AT		AU		AV		AW		AX		AY		AZ		BA		BB		BC		BD		BE		BF		BG		BH		BI		BJ		BK		BL		BM		BN		BO		BP		BQ		BR		BS		BT		BU		BV		BW		BX		BY		BZ		CA		CB		CC		CD		CE		CF		CG		CH		CI		CJ		CK		CL		CM		CN		CO		CP		CQ		CR		CS		CT		CU		CV		CW		CX		CY		CZ		DA		DB		DC		DD		DE		DF		DG		DH		DI		DJ		DK		DL		DM		DN		DO		DP		DQ		DR		DS		DT		DU		DV		DW		DX		DY		DZ		EA		EB		EC		ED		EE		EF		EG		EH		EI		EJ		EK		EL		EM		EN		EO		EP		EQ		ER		ES		ET		EU		EV		EW		EX		EY		EZ		FA		FB		FC		FD		FE		FF		FG		FH		FI		FJ		FK		FL		FM		FN		FO		FP		FQ		FR		FS		FT		FU		FV		FW		FX		FY		FZ		GA		GB		GC		GD		GE		GF		GG		GH		GI		GJ		GK		GL		GM		GN		GO		GP		GQ		GR		GS		GT		GU		GV		GW		GX		GY		GZ		HA		HB		HC		HD		HE		HF		HG		HH		HI		HJ		HK		HL		HM		HN		HO		HP		HQ		HR		HS		HT		HU		HV		HW		HX		HY		HZ		IA		IB		IC		ID		IE		IF		IG		IH		IJ		IK		IL		IM		IN		IO		IP		IQ		IR		IS		IT		IU		IV		IW		IX		IY		IZ		JA		JB		JC		JD		JE		JF		JG		JH		JI		JJ		JK		JL		JM		JN		JO		JP		JQ		JR		JS		JT		JU		JV		JW		JX		JY		JZ		KA		KB		KC		KD		KE		KF		KG		KH		KI		KJ		KK		KL		KM		KN		KO		KP		KQ		KR		KS		KT		KU		KV		KW		KX		KY		KZ		LA		LB		LC		LD		LE		LF		LG		LH		LI		LJ		LK		LL		LM		LN		LO		LP		LQ		LR		LS		LT		LU		LV		LW		LX		LY		LZ		MA		MB		MC		MD		ME		MF		MG		MH		MI		MJ		MK		ML		MM		MN		MO		MP		MQ		MR		MS		MT		MU		MV		MW		MX		MY		MZ		NA		NB		NC		ND		NE		NF		NG		NH		NI		NJ		NK		NL		NM		NN		NO		NP		NQ		NR		NS		NT		NU		NV		NW		NX		NY		NZ		OA		OB		OC		OD		OE		OF		OG		OH		OI		OJ		OK		OL		OM		ON		OO	
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PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY
PERSON, UNLESS THEY ARE ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL,
EXPOSED TO ANY THIS DOCUMENT

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL
LIGHT POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES, OMISSIONS, OR MISSING INFORMATION.
2. ELECTRICAL PLANS AND DETAILS SHALL BE DIMENSIONAL TO ANY VESSEY PLANT LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. THE CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAPPED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH, OR TERMINAL BOX USING THE FOLLOWING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.):
 - A. ALL ELECTRICAL EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE THE BEST QUALITY AVAILABLE.
 - B. ALL ELECTRICAL EQUIPMENT THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT, MATERIALS SHALL BE LISTED "UL" - WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING AGENCIES. JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS, SPECIFICATIONS, AND, NEMA, NFPA AND "UL" LISTED.
 - C. ALL CONDUIT SHALL HAVE A FULL COAT OF PROTECTANT.
4. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERLOCKING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 AMP.
5. ALL EXISTING ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IBC, NEC AND ALL APPLICABLE CODES AND ALL ELECTRICAL CODES.
6. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
7. PROVIDE WORK FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHICH INDICATES ALL DIMENSIONS, CENTER POINT, RECEPTACLES SHALL HAVE SERIAL MPID - A LIST COPIES.
8. PROVIDE WORK FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHICH INDICATES ALL DIMENSIONS, CENTER POINT, RECEPTACLES SHALL HAVE SERIAL MPID - A LIST COPIES.

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED.
2. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.

- A. RIGID CONDUIT SHALL BE U.L. LABELED, UNDRUNG, ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN CONCRETE OR CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN CONTACT WITH WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH UL LISTED WRAP PROCESS NO. 3.
- B. WHEN RIGID CONDUIT IS USED IN CONTACT WITH EARTH, THE WRAP SHALL HAVE U.L. LISTED WRAP PROCESS NO. 3. WHEN FLEXIBLE CONDUIT IS USED, THE WRAP SHALL HAVE U.L. LISTED WRAP PROCESS NO. 3.
- C. IT IS REQUIRED THAT THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE ANY TRENCHING, DRILLING, OR DIGGING.
- D. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
- E. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE FOUR INCH 101.6 mm). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS.
- F. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND GROUND POTENTIAL SURROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER.
- G. BE PREPARED OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A CLEAN, ORDERLY AND SAFE CONDITION.
- H. GROUNDING ELECTRICAL SYSTEM.

1. **SURFACE PREPARATION:** ALL CONNECTIONS SHALL BE MADE TO BARE METAL SURFACES. ALL SURFACES SHALL BE PROPERLY PREPARED, INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WELDERS SHALL BE ALLOWED TO WELD OR BURN ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-ORGANIZING AGENT APPLIED PRIOR TO INSTALLATION.
 2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
- B. EXTERNAL CONNECTIONS:**
1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAMETAL" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
 2. ALL ABOVE GRADE GROUNDING AND BONDING CONNECTIONS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD). MECHANICAL CONNECTIONS FOR THESE CONNECTIONS THAT DEPEND SOLELY ON CONTACT SHALL NOT BE USED. ALL CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.

- C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL. OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED SOIL.
- D. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD GROUND ROD CONDUCTORS. ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOFT BASE COPPER, NUMBER, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
- E. LUGS:

1. LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #84 BE OR EQUIVALENT.

- | | | |
|----|--------------------|---------|
| A. | 535 WCM DLO | 54800BE |
| B. | 262 WCM DLO | 54872BE |
| C. | #170 DLO | 54862BE |
| D. | #4/0 THWN AND BARE | 54806BE |
| E. | #2/0 THWN | 54862BE |
| F. | #2 THHN | 54207BE |
| G. | #6 DLO | 54205BE |

2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO. 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

4. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

SINGLE MAST AND SELF SUPPORTING TOWERS

1. GENERAL
- A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
- B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CALDWELDED TO TOWER BASE PLATE.

COAXIAL ANTENNA CABLE

1. GENERAL
- A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
- B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. THEREAFTER ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER THE MANUFACTURER'S COMMENTS. TERMINATE ALL COAXIAL CABLES THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
2. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".

- A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
4. COAXIAL CABLE IDENTIFICATION
 - A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLES, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
 1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE

2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
- B. USE ANDREW CABLE TEST (PTA 27280) TO SECURE IDENTIFICATION TAGS. CLASS SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PREPARE AND CONDUCT THE TESTING. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER/QUALIFIED PERSONNEL TO ASSIST IN ANY WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH 48 HOURS NOTICE PRIOR TO TIME OF THE SNEEP TEST.

925B PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO	ER500201
DRAWN BY:	A. AZUCENA
CHECKED BY:	S. RO

[illegible]

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL 33881
LIGHT POLE

SHEET TITLE	GENERAL NOTES
-------------	---------------

GN-2

PROJECT NO:	ER800201
DRAWN BY:	A. AZUCENA
CHECKED BY:	S. BO

[illegible]

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, TO PROVIDE ANY OF THE FOLLOWING SERVICES:

TA90XSDQKA
9FLB004615
AVE H NE &
10TH ST NE
WINTER HAVEN, FL
LIGHT POLE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

0.

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.

2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.

3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.

4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.

5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.

6. THIS LAYOUT APPLIES TO SPEEDS 55 MPH OR LESS.

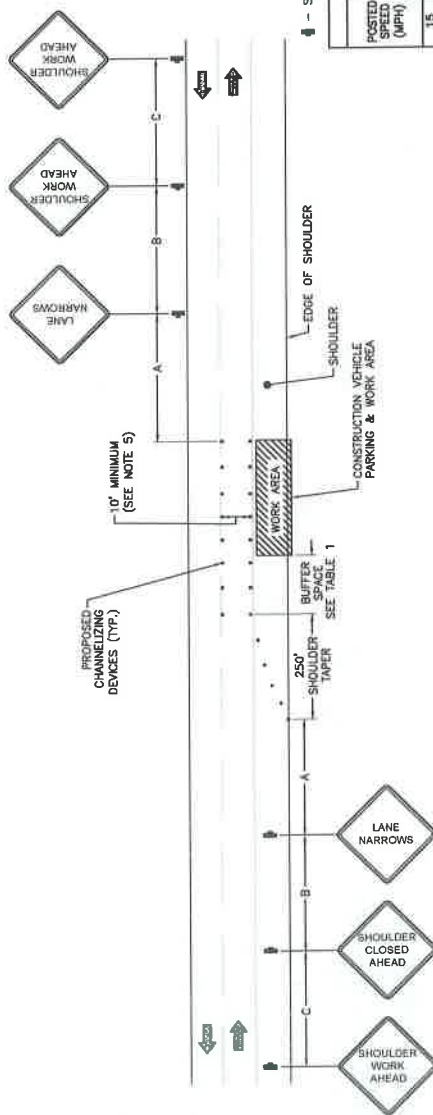


TABLE 1

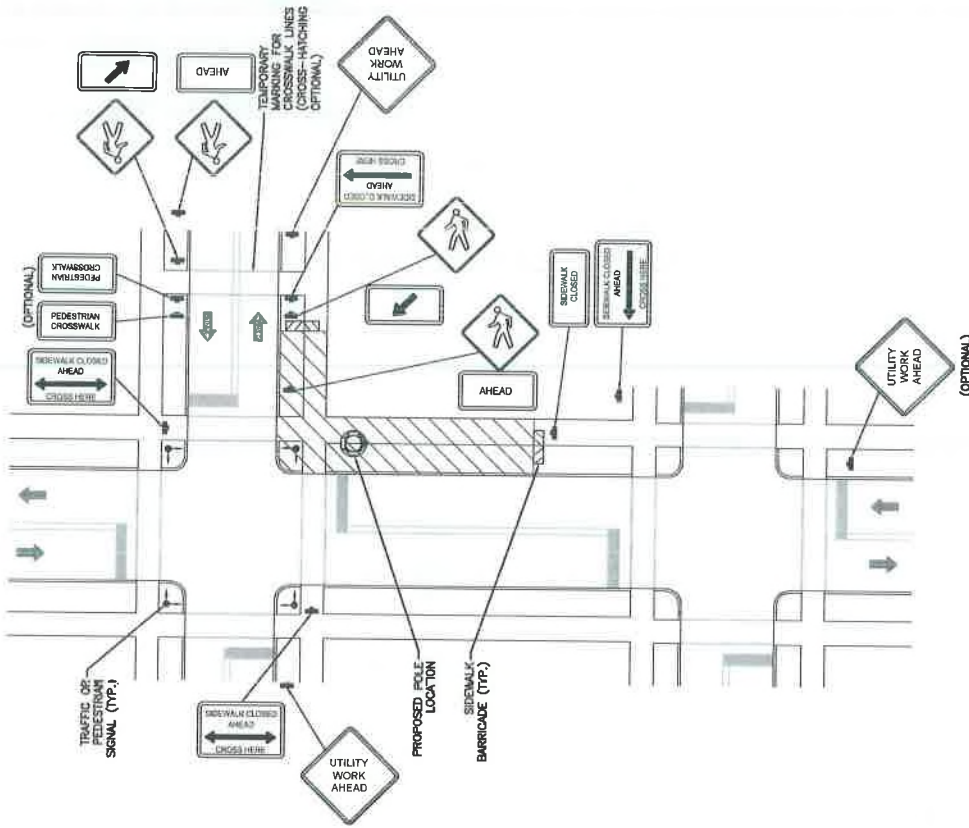
POSTED LOAD (NPH)	DISTANCE BETWEEN SPOONS				TAPER S (SEE NOTE)	BUFTER
	A	B	C	L		
15	100	100	100	100	45	100"
20	100	100	100	100	60	115
25	100	100	100	100	125	155
30	200	200	200	200	180	200
35	200	200	200	200	245	250
40	350	350	350	350	300	305
45	350	350	350	350	540	360
50	500	500	500	500	600	425
55	500	500	500	500	650	495
60	500	500	500	500	730	570
65	500	500	500	500	780	645

NOTES:

- A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
- B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
- C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
- D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET 8.1.
- E) TAPE LENGTHS SHOWN BASED ON 12" LANE WIDTH. SEE NOTE 18, SHEET 8.1.

**TRAFFIC CONTROL PLAN -
SHOULDER WORK**

SCALE F: NOT TO SCALE



TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

→

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL, SIGNALIZE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNALS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN IN THE MUTCD. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS, UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS. ALL DEVICES SHALL BE PROVIDED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE ADJUSTED TO PROVIDE FOR VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURES OF THE ROADWAY AND TO THE ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
8. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMAN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 8% VY SLOPE WITHIN THE TAPER OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE TAPER SHALL BE BACKFILLED AND PLACED ON A MINIMUM 8% VY SLOPE. PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE REQUEST OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER OR BUFFER SPACE. THE DISTANCE BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT SPACE CHANGING.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR LANE OF TRAVEL, CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
$$L = W \cdot S^2 / 900$$
 (40 MPH AND HIGHER) OR $L = W \cdot S$ (OVER 40 MPH).
WHERE: W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).

CITY OF WINTER HAVEN

Engineering Services Division
490 3rd Street N.W. 33881
Phone 863-291-5851

Sheet 1 of 2

9FLX002223

USE PERMIT

Street Name Ave C NW Date June 9, 2016
Located between 2nd Street NW, Street and 1st Terrace NW Street
Permission Granted to Mobilitie, LLC Phone number - 727-512-5599
For construction and maintenance of End user proposes to install a 120' new pole within an existing ROW.
Scope of work: Install a new pole with proposed backhaul transport equipment.

This permit is subject to the following conditions:

1. The construction and maintenance of such utility shall not interfere with the property and the rights of a prior occupant.
2. All work shall be done in keeping with standards established by the Engineering Services Director and under the supervision of Mike Foster, City Construction Inspector, Phone (863) 291-5850, Cell (863) 287-2727.
3. All material and equipment shall be subject to inspection by a representative of the Engineering Services Director.
4. Construction shall be performed in a safe manner and in accordance with the regulations of OSHA, USDA and other applicable agencies. The City shall be relieved of all responsibilities for damages of any nature arising from this permit. Subject to the above terms and conditions, the permittee shall take such safety measures, including placing and display of caution signs, as good practice dictates in conduct of construction and maintenance work herein described.
5. The permittee shall provide for safe pedestrian traffic throughout the construction time. Where existing sidewalks and other walkways exist prior to this work, they or safe alternate trafficable ways, shall be maintained.
6. All city property shall be restored to its original condition to the satisfaction of the Engineering Services Director and/ or his authorized representative.
7. The applicant shall indemnify, defend, and hold harmless the City from and against any and all claims, suits, actions, judgments, demands, taxes, losses, costs, expenses, damages, and liability caused by, resulting from, or arising out of the negligent acts, errors, or omissions of the applicant, its officers, employees, agents, or representatives that may occur by reason of this construction.
8. The attached sketch covering details of this construction shall be made a part of this permit.
9. The applicant, at a minimum, shall obtain insurance coverage for specific risks and in such amounts and with insurers as determined acceptable by the City. Any such insurance coverage(s) required by the City shall represent the minimum amount of coverage required. The applicant, at its sole cost, shall obtain insurance coverage(s) as follows:
 - a. Workers' Compensation/Employer's Liability:
 - For each accident (\$5,000,000.00)
 - Disease – Policy Limit (\$5,000,000.00)
 - Disease – Each Employee (\$5,000,000.00)
 - b. Commercial General Liability ("CGL"):
 - For each occurrence (\$5,000,000.00)
 - General Aggregate (\$5,000,000.00)
 - Products/Completed Operations Aggregate (\$5,000,000.00)
 - Personal and Advertising Injury (\$5,000,000.00)
 - c. Business Automobile Policy:
 - Each occurrence and bodily injury and property damage liability combined (\$5,000,000.00)
10. It is expressly stipulated that this permit is a license for permissive use only and that placing of facility upon public property pursuant to this permit shall not operate to create or to vest any property in the permittee or his client.

Pursuant to section 337.403(1), Florida statutes, whenever necessary for the construction, repair, improvement maintenance, safe and efficient operation, alteration or relocation of all, or any portion of said Transportation Facility/City Property as determined by the Engineering Services Director, any or all utilities and appurtenances authorized here under or any shall be immediately removed from said Transportation Facility/City Property or reset or relocate thereon as requested by the Engineering Services Director and at the expense of the Permittee.

11. The permittee shall commence actual construction in good faith on TBD and shall complete the construction within 7 days. This permit shall be void if the work is not started within sixty (60) days from date of said permit.
12. Applicant declares that prior to filling out the application he has ascertained the location of all existing utilities, both aerial and underground. Applicant also declares that all other utilities within the area were notified and that he is including a notification copy with this permit application. List the name of the Utility, Date, and the authorized Contact person from each Utility that were contacted: Mobilite, LLC will send all required utility notification letters, and proof of such notification, when Mobilite's project to install utility poles within the City's rights-of-way has been approved by the City.
-
-
-

13. Notify the Engineering Services Division (863) 291-5851 a minimum of 48 hours prior to the commencement of construction. A SUNSHINE ONE number must be provided at this time. Failure to provide proper notification may result in the stoppage of work. **Notify the Engineering Services Division the day construction actually commences.**
14. If the applicant transfers or assigns its assets located within the City's right-of-way, the transferee or assignee shall be obligated to comply with the terms of this Use Permit and any and all applicable provisions of the WHC.
15. Nothing herein is intended to waive the City's sovereign immunity or the limits of its liability under Section 768.28 of the Florida Statutes regardless of whether such claims are based on contract, statute, tort, strict liability, product liability, negligence or otherwise.
16. **The use of missiles is limited and must be approved by the Engineering Services Director prior to Construction.**

Approved by: _____
(Engineering Services Director)

Submitted by: Michael Nuckols
(Applicant's Signature)

Date: _____

Michael Nuckols
(Applicant's name printed)

SUNSHINE ONE# _____

City of Winter Haven Engineering Services Division Permit # _____

Note: Attach Applicable Plans as Required



Winter Haven, FL 33881



CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

100

SHEET NUMBER



1 EXHIBIT PHOTO - GENERIC (NOT SITE SPECIFIC)
SCALE: N.T.S.



② AERIAL SITE LOCATION
SCALE: N.T.S.



NOTE: THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY PINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED.

NOTE:
PROPOSED 120'0" POLE IN THE R.O.W.
R.O.W. BOUNDARIES TO BE CONFIRMED AFTER
SURVEY



3 ENLARGED SITE PLAN
SCALE: N.T.S.

FL Network Transport,
LLC

PROJECT NUMBER:	8FLX00222JA
DRAWN BY:	###
CHECKED BY:	###

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THEIR PRACTICE.

1908-1909

9FLX002223A
28.025009.-81.728178
Winter Haven, FL 33881

UTILITY POLE

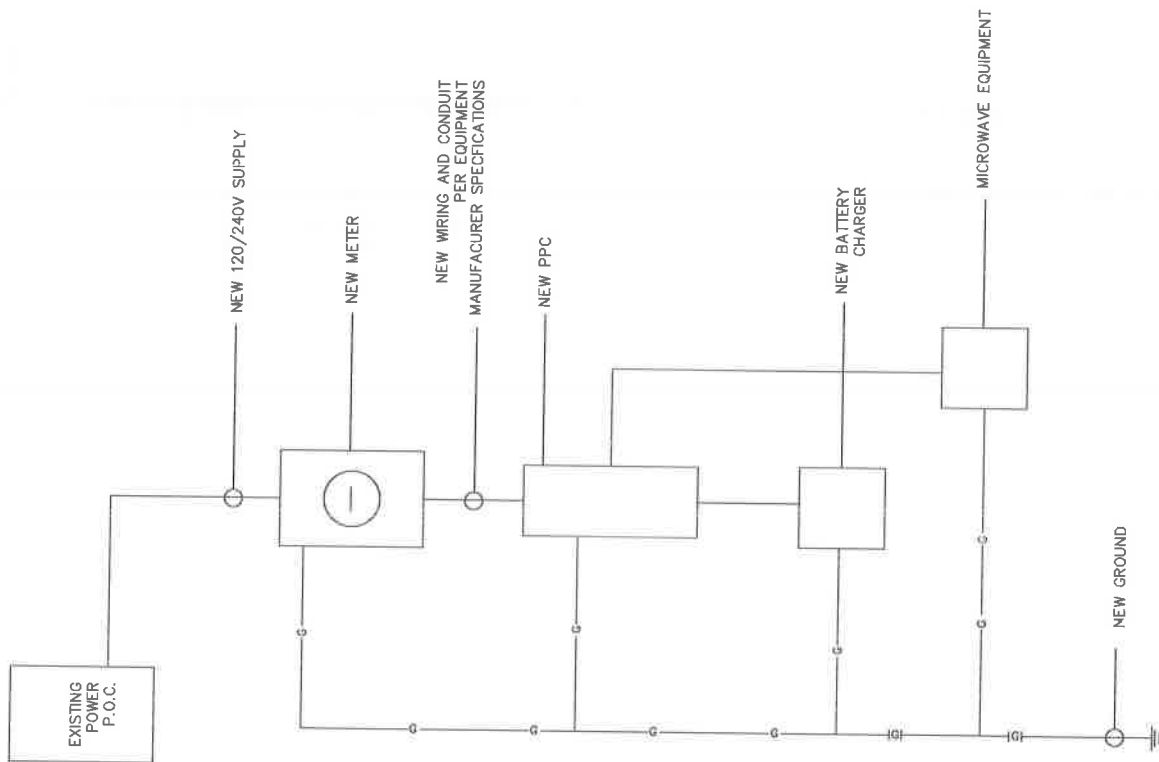
www.elsevier.com/locate/jmb

EXHIBIT PHOTO &
ENLARGED SITE PLAN

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1.0





ONE LINE DIAGRAM

CITY OF WINTER HAVEN

Engineering Services Division
490 3rd Street N.W. 33881
Phone 863-291-5851

USE PERMIT

Site Location: 28.004107-81.716575

Street Name Cypress Gardens Blvd Date June 9, 2016
 Located between 6th Street SE, Street and 8th Street SE Street
 Permission Granted to Mobilitie, LLC Phone number - 727-512-5599
 For construction and maintenance of End user proposes to install equipment on a new pole within an existing ROW.
Scope of work: Install a new pole with proposed backhaul transport equipment.

This permit is subject to the following conditions:

1. The construction and maintenance of such utility shall not interfere with the property and the rights of a prior occupant.
2. All work shall be done in keeping with standards established by the Engineering Services Director and under the supervision of Mike Foster, City Construction Inspector, Phone (863) 291-5850, Cell (863) 287-2727.
3. All material and equipment shall be subject to inspection by a representative of the Engineering Services Director.
4. Construction shall be performed in a safe manner and in accordance with the regulations of OSHA, USDA and other applicable agencies. The City shall be relieved of all responsibilities for damages of any nature arising from this permit. Subject to the above terms and conditions, the permittee shall take such safety measures, including placing and display of caution signs, as good practice dictates in conduct of construction and maintenance work herein described.
5. The permittee shall provide for safe pedestrian traffic throughout the construction time. Where existing sidewalks and other walkways exist prior to this work, they or safe alternate trafficable ways, shall be maintained.
6. All city property shall be restored to its original condition to the satisfaction of the Engineering Services Director and/ or his authorized representative.
7. The applicant shall indemnify, defend, and hold harmless the City from and against any and all claims, suits, actions, judgments, demands, taxes, losses, costs, expenses, damages, and liability caused by, resulting from, or arising out of the negligent acts, errors, or omissions of the applicant, its officers, employees, agents, or representatives that may occur by reason of this construction.
8. The attached sketch covering details of this construction shall be made a part of this permit.
9. The applicant, at a minimum, shall obtain insurance coverage for specific risks and in such amounts and with insurers as determined acceptable by the City. Any such insurance coverage(s) required by the City shall represent the minimum amount of coverage required. The applicant, at its sole cost, shall obtain insurance coverage(s) as follows:
 - a. Workers' Compensation/Employer's Liability:

• For each accident	(\$5,000,000.00)
• Disease – Policy Limit	(\$5,000,000.00)
• Disease – Each Employee	(\$5,000,000.00)
 - b. Commercial General Liability ("CGL"):

• For each occurrence	(\$5,000,000.00)
• General Aggregate	(\$5,000,000.00)
• Products/Completed Operations Aggregate	(\$5,000,000.00)
• Personal and Advertising Injury	(\$5,000,000.00)
 - c. Business Automobile Policy:

• Each occurrence and bodily injury and property damage liability combined	(\$5,000,000.00)
--	------------------
10. It is expressly stipulated that this permit is a license for permissive use only and that placing of facility upon public property pursuant to this permit shall not operate to create or to vest any property in the permittee or his client.

Pursuant to section 337.403(1), Florida statutes, whenever necessary for the construction, repair, improvement maintenance, safe and efficient operation, alteration or relocation of all, or any portion of said Transportation Facility/City Property as determined by the Engineering Services Director, any or all utilities and appurtenances authorized here under or any shall be immediately removed from said Transportation Facility/City Property or reset or relocate thereon as requested by the Engineering Services Director and at the expense of the Permittee.

11. The permittee shall commence actual construction in good faith on TBD and shall complete the construction within 7 days. This permit shall be void if the work is not started within sixty (60) days from date of said permit.
12. Applicant declares that prior to filling out the application he has ascertained the location of all existing utilities, both aerial and underground. Applicant also declares that all other utilities within the area were notified and that he is including a notification copy with this permit application. List the name of the Utility, Date, and the authorized Contact person from each Utility that were contacted: Mobilite, LLC will send all required utility notification letters, and proof of such notification, when Mobilite's project to install utility poles within the City's rights-of-way has been approved by the City.
13. Notify the Engineering Services Division (863) 291-5851 a minimum of 48 hours prior to the commencement of construction. A SUNSHINE ONE number must be provided at this time. Failure to provide proper notification may result in the stoppage of work. **Notify the Engineering Services Division the day construction actually commences.**
14. If the applicant transfers or assigns its assets located within the City's right-of-way, the transferee or assignee shall be obligated to comply with the terms of this Use Permit and any and all applicable provisions of the WHC.
15. Nothing herein is intended to waive the City's sovereign immunity or the limits of its liability under Section 768.28 of the Florida Statutes regardless of whether such claims are based on contract, statute, tort, strict liability, product liability, negligence or otherwise.
16. **The use of missiles is limited and must be approved by the Engineering Services Director prior to Construction.**

Approved by: _____
(Engineering Services Director)

Submitted by: Michael Nuckols
(Applicant's Signature)

Date: _____

Michael Nuckols
(Applicant's name printed)

SUNSHINE ONE# _____

City of Winter Haven Engineering Services Division Permit # _____

Note: Attach Applicable Plans as Required

WINTER HAVEN, FL 33880



CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

EXISTING POLE-

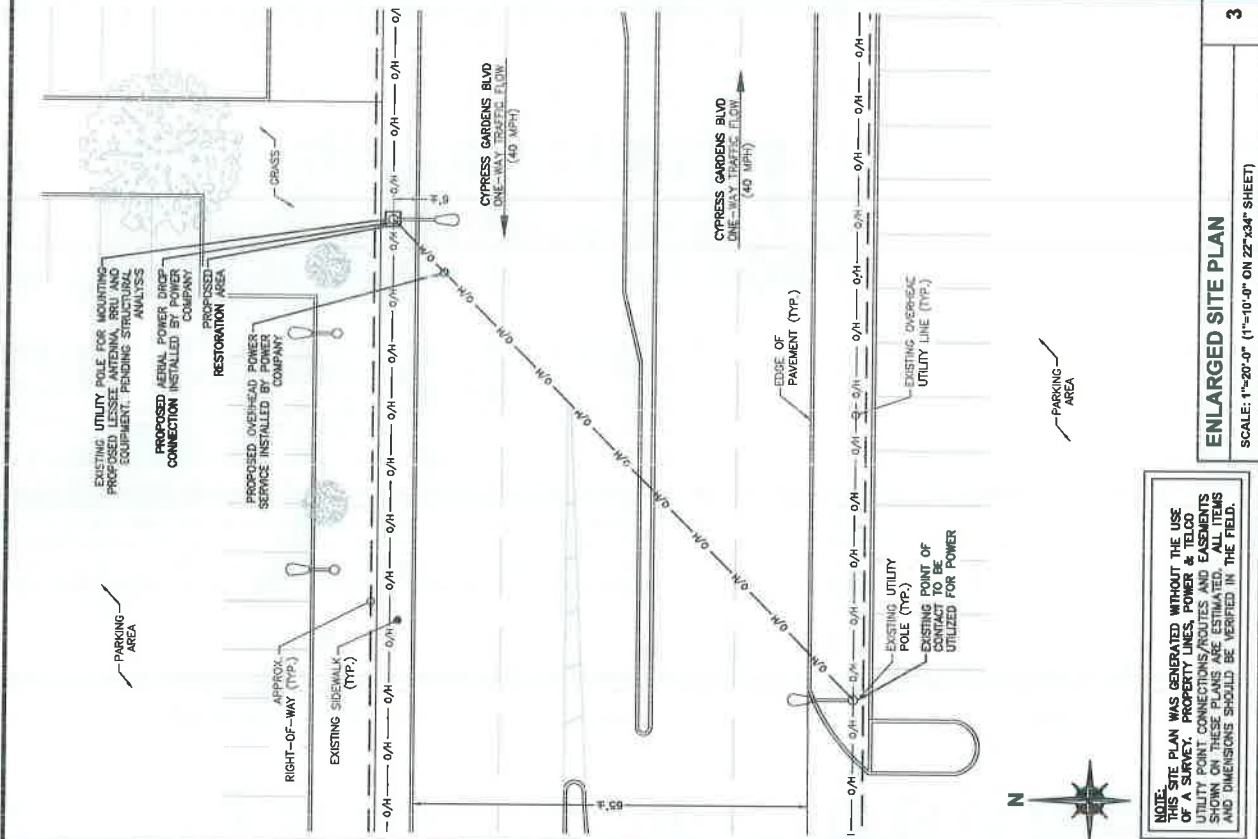
EXHIBIT PHOTO

SCALE: NOT TO SCALE



AERIAL SITE LOCATION

SCALE: NOT TO SCALE



NOTE: THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

ENLARGED SITE PLAN

SCALE: 1"=20'-0" (1"=10'-0" ON Z2"x34" SHEET)

3

SITE PLAN & EXHIBIT PHOTO

SHEET NUMBER

1.0

TA90XSDQHA
9FLB004612
CYPRESS GARDENS BLVD &
SE PLAZA RD
WINTER HAVEN, FL 33880
UTILITY POLE

SHEET TITLE

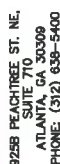
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL, CHURCHER, TO ALTER THIS DOCUMENT.

PRELIMINARY

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	W. WOODS

mobilitie

925B PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400



NOTE: PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	W. WOODS

[illegible]

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ATTORNEY, THE DIRECTOR OF A LICENSED PROFESSIONAL CORPORATION, OR AN INVESTMENT ADVISOR, TO

TA90XSDQHA
9FLB004612
CYPRESS GARDENS BLVD &
SE PLAZA RD
WINTER HAVEN, FL 33880
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.0

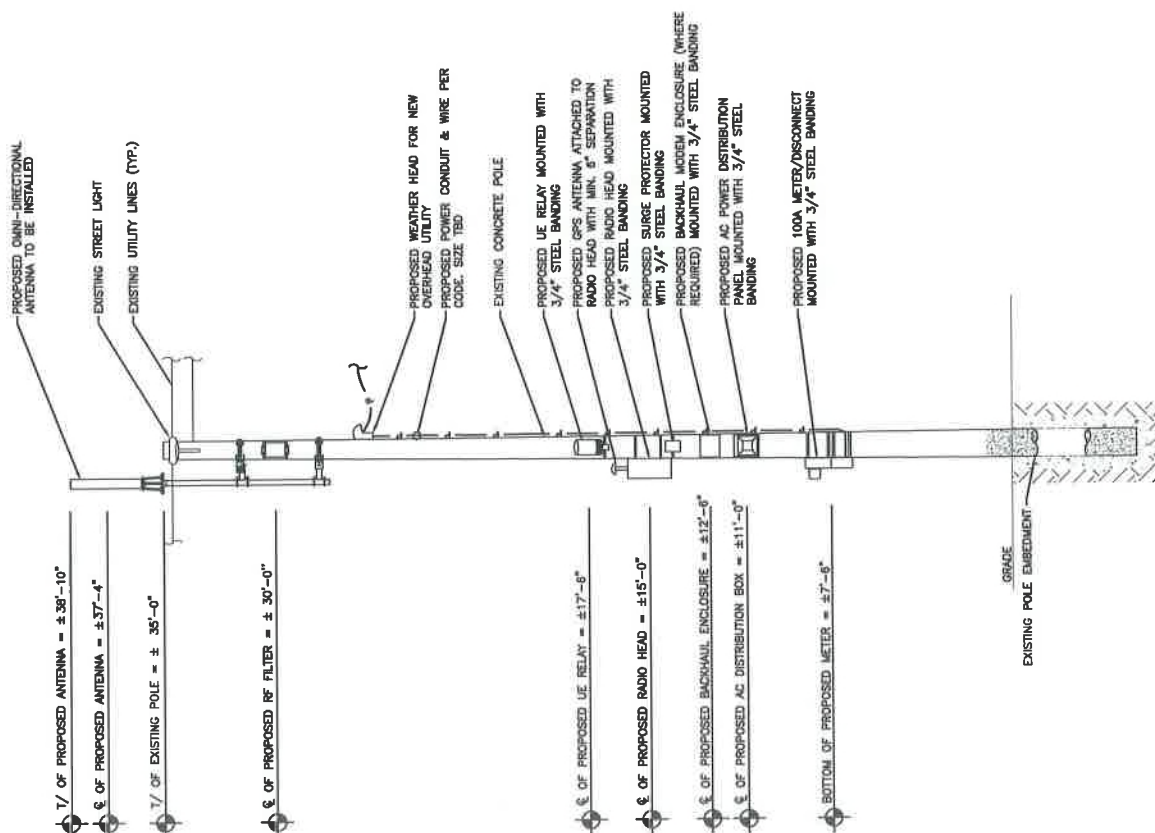
SELOIN

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m³)

BAND 41 (2500MHz) EQUIPMENT CHART		
DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	35.4" X 4.7" DIAMETER	11 LBS
1	20.1" X 9.1" X 9.6"	55.1 LBS
1	0.3" X 2.6" DIAMETER	0.3 LBS
1	9.25" X 9.5" X 3.61"	14 LBS
1	13.6" X 8.1" X 2.4"	7.7 LBS
1	13.0" X 7.5" DIAMETER	9.9 LBS
1	6.44" X 4.65" X 3.3"	180

PROPOSED FRONT POLE ELEVATIONS

SCALE: 1" = 5'





PROJECT NO:	ERG00201
DRAWN BY:	J BRAZA
CHECKED BY:	W. WOODS

A	05.12.18	FOR REVIEW
---	----------	------------

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

TA90XSDQHA
9FLB004612
CYPRESS GARDENS
SE PLAZA RD
WINTER HAVEN, FL
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.1

NOTE: PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D988. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m³)

BAND 41 (2500MHz) EQUIPMENT CHART

BAND 41 (2400MHz) EQUIPMENT CHART			
QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.7" DIAMETER	11 LBS
1	MOUNTED RADIO	39.1" X 9.1" X 8.1"	55.1 LBS
1	GPS ANTENNA	0.6" X 2.6" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.9"	14 LBS
1	REFLECT FILTER	13.5" X 8.1" X 2.4"	7.7 LBS
1	MOUNTED RELAY	13.7" X 7.3" DIAMETER	1.4 LBS
1	SUBCUT PROTECTOR	1.7" X 1.7" X 0.7"	0.9 LBS

PROPOSED SIDE POLE ELEVATION

SCALE: 1" = 5'

1

mobilitie
Intelligent Information

9255 PEACHTREE ST., NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 838-5400

This is a scan of a blank page from a lined notebook. The paper has horizontal ruling lines spaced evenly down its length. There are no markings, text, or drawings on the page.

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DRAWN BY:	J BRAZA
CHECKED BY:	W. WOODS

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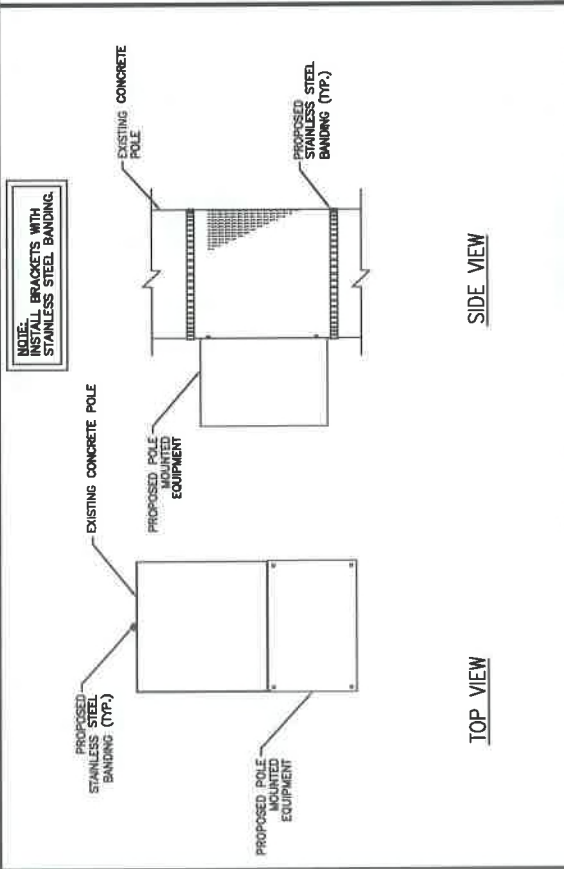
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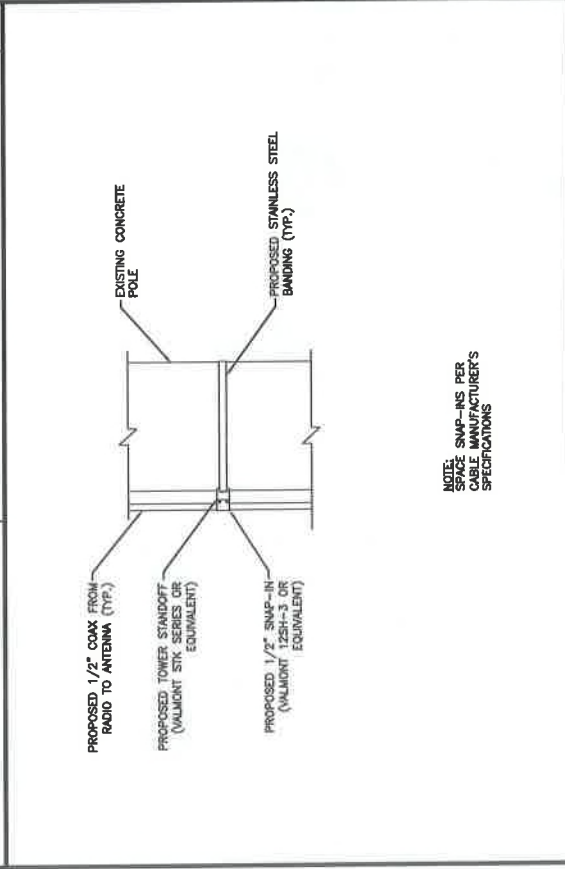
SHEET TITLE

**ANTENNA & EQUIPMENT
MOUNTING DETAILS**

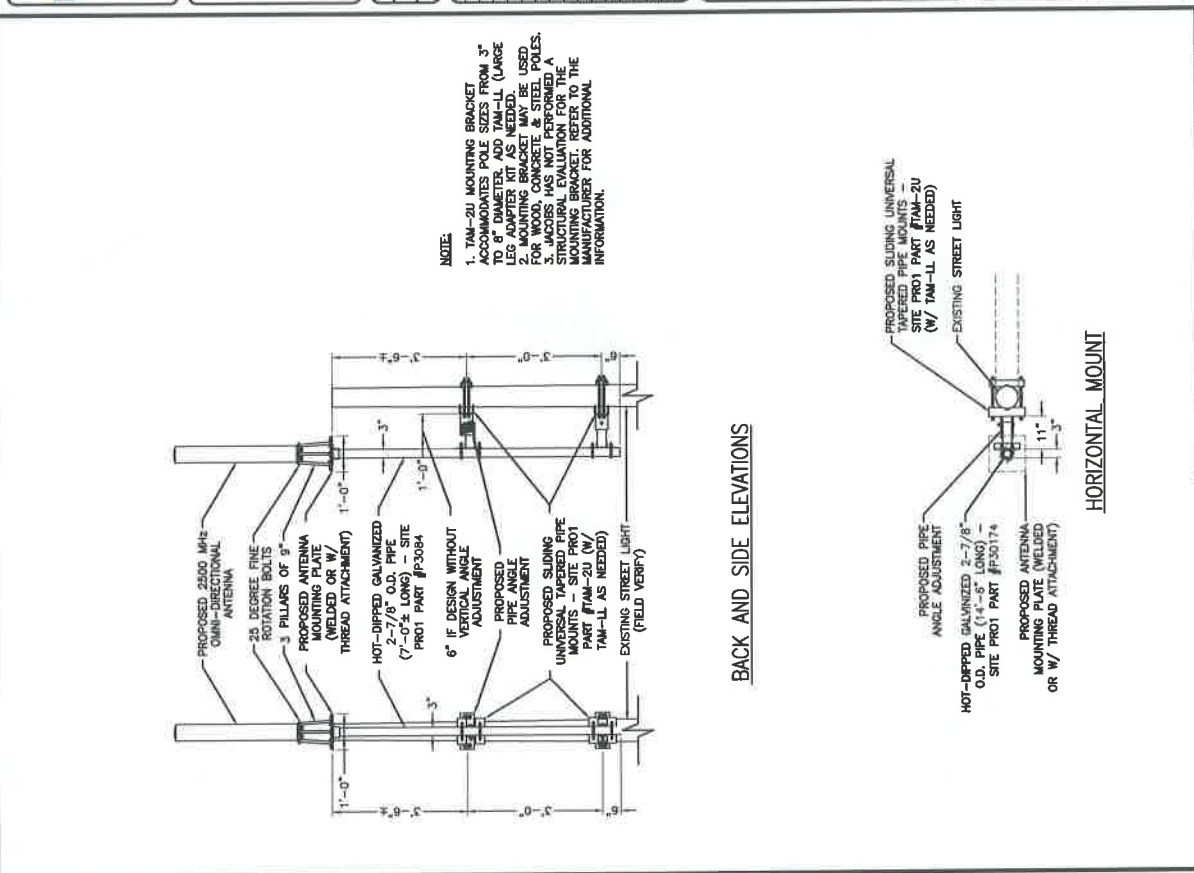
SHEET NUMBER
3.0



1	EQUIPMENT MOUNTING DETAIL
	SCALE: NOT TO SCALE



CABLE MOUNTING DETAIL	2
SCALE: NOT TO SCALE	



<p>ANTENNA MOUNTING DETAIL</p>	<p>3</p>
<p>SCALE: NOT TO SCALE</p>	

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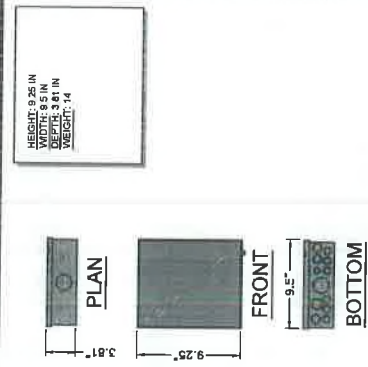
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WIND & EQUIPMENT

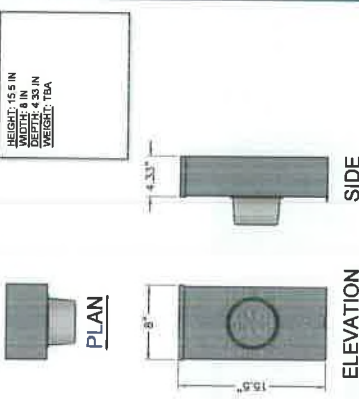
DETAILS

SHEET NUMBER

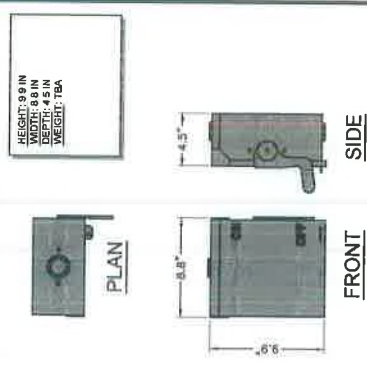
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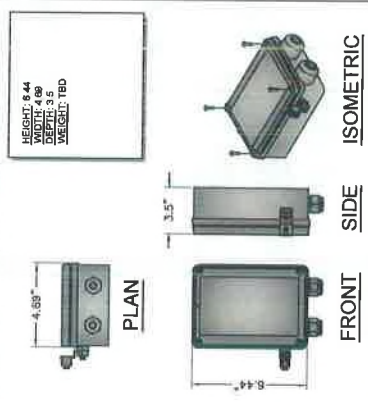
DISTRIBUTION	SCALE	
	W	T
9		



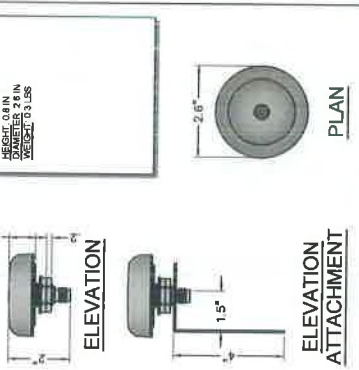
METER SOCKET



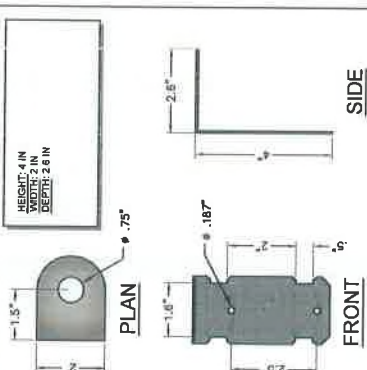
CONNECT	SCALE	11



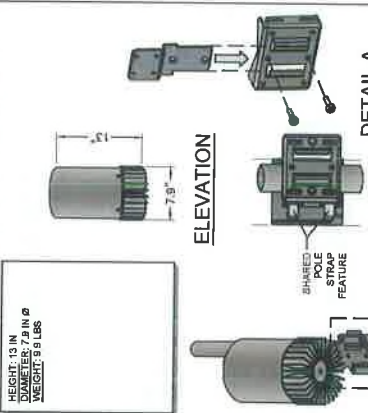
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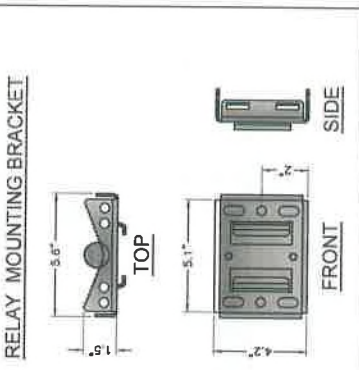
ANTENNA	SCALE	7
	NTS	



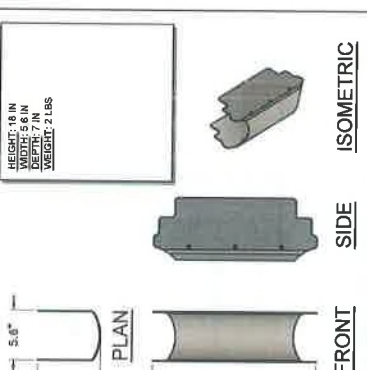
MOUNTING



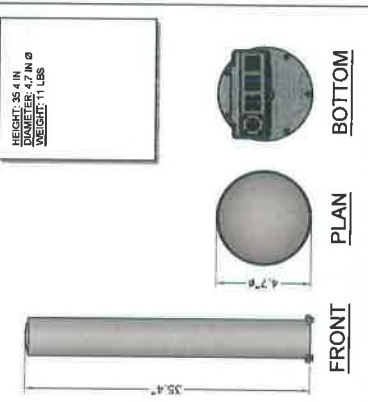
SEE 'DETAIL A'



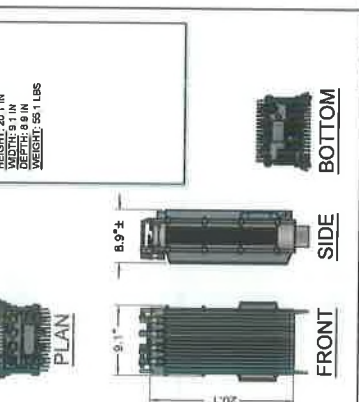
NTED RELAY	SCALE	4
	NTS	



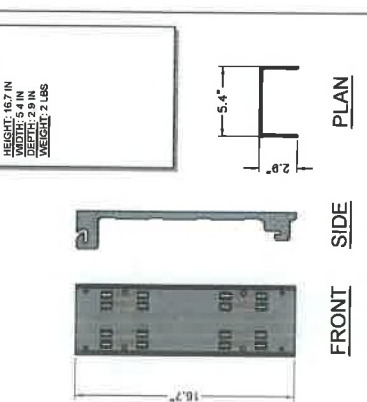
O SUN SHIELD	SCALE	5
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UNITED ANTIENNA

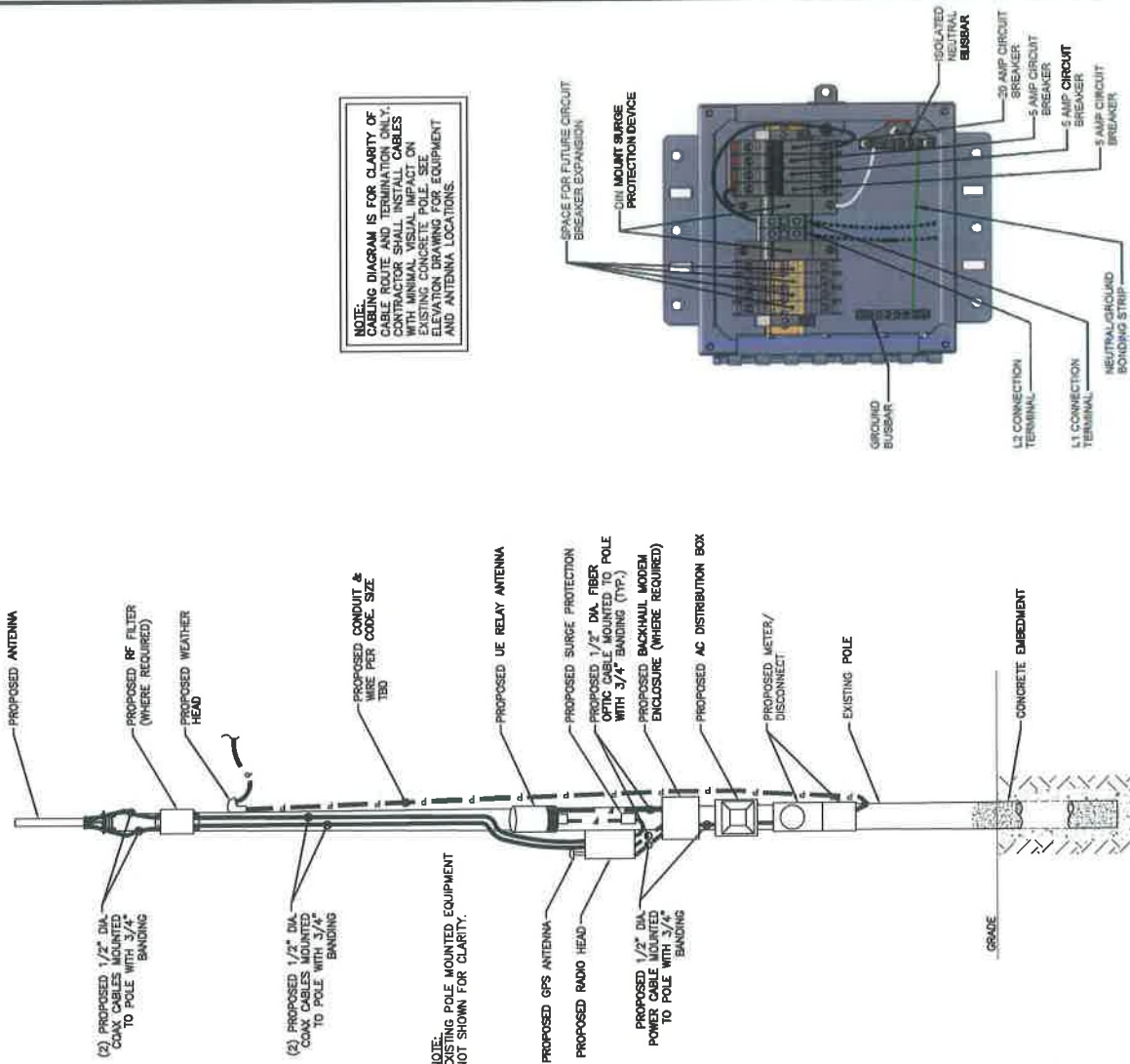


COUNTED RADIO



RADIO MOUNT

NOTE:
CABLING DIAGRAM IS FOR CLARITY OF
CABLE ROUTE AND TERMINATION ONLY.
CONTRACTOR SHALL INSTALL CABLES
WITH MINIMAL VISUAL IMPACT ON
EXISTING CONCRETE POLE. SEE
ELEVATION DRAWING FOR EQUIPMENT
AND ANTENNA LOCATIONS.



CABLING DIAGRAM

SCALE F: NOT TO SCALE

UTILITY NOTES:

WORK INCLUDES:

1. THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS UTILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
2. THE FURNISHING AND INSTALLATION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
3. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON THE DRAWINGS.
4. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE.
5. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE COMPONENTS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT SHALL BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
6. EXCAVATION, TRENCHING, AND BACKFILLING FOR (CONDUITS), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AGENCIES:

N.E.C. NATIONAL ELECTRICAL CODE
N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.E. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS
E.E.M.A. ELECTROTECHNICAL MANUFACTURERS ASSOCIATION
U.S. NATIONAL BUREAU OF STANDARDS LABORATORIES, INC.
N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

1. RACEWAYS AND WIRING SHALL BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THINW. SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES, UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDING IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
6. ALL STEEL CONDUIT SHALL BE BORED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

GENERAL NOTES: 1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL AND OTHER MECHANICAL ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION. ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ARCHITECT/ENGINEER BEFORE STARTING WORK. 2. ALL ELECTRICAL DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR SHALL BE SPECIFICALLY NOTED OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR COMPLETE OPERATING INSTALLATION. ELECTRICAL CONFLICTS OF (FED) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANIES:

THE UTILIZATION CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH THE LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCIETIES, PRIVATE DISTRIBUTION SYSTEMS, AND ALL NECESSARY PERMITS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BIDDING PRICE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING SUCH SERVICES. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT LOCATIONS. THE ELECTRICAL CONTRACTOR SHALL PRIOR TO SUBMITTING BID, ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION SYSTEMS TO THE REQUIRED 100% OF THE AVAILABLE FAULT CURRENT. THE CONTRACTOR SHALL OBTAIN QUALITY CONTROL REQUIRED TO



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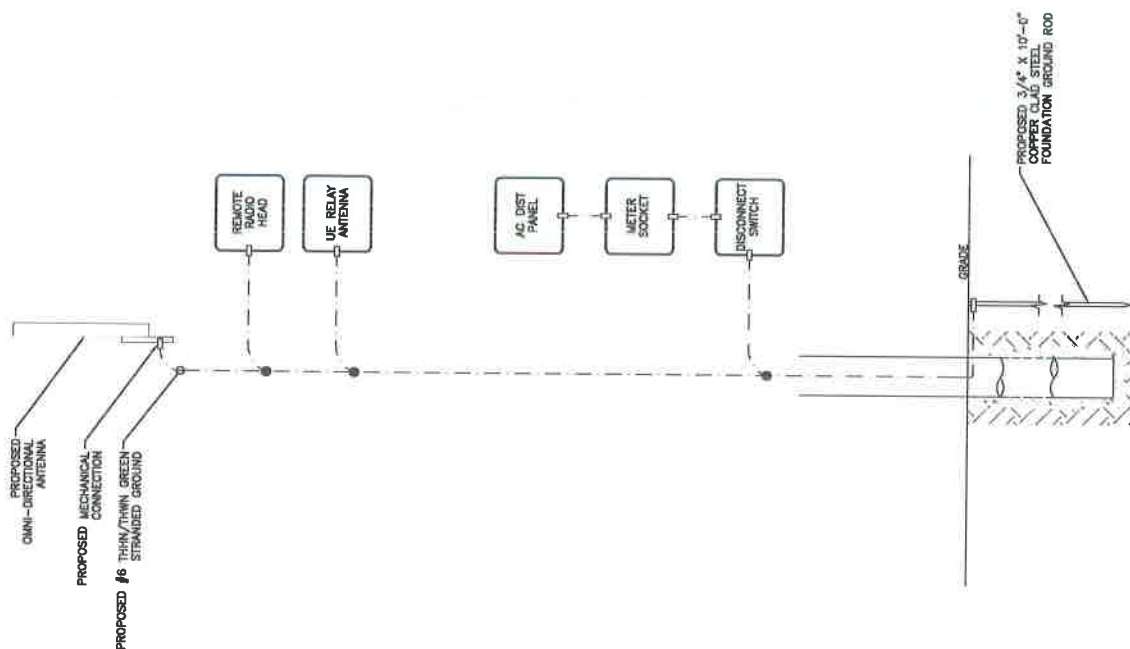
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UTILITY POLE

SHEET TITLE E

GROUNDING DETAILS

SHEET NUMBER

5.0



LEGEND

- GADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC
PURPOSES ONLY. SEE ELEVATION
DRAWING FOR EQUIPMENT AND
ANTENNA LOCATIONS.

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DEFICIENCIES OR OMISSIONS OF THE CONTRACT DOCUMENTS.
2. ELECTRICAL PLANS OR DRAWINGS MUST BE DIMENSIONALLY ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. CONTRACTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, DISTRIBUTION BOX, SWITCH, AND/OR CONTROL BOX. TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
4. ALL ELECTRICAL SYSTEMS SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE THE BEST OF ITS KIND.
5. THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT, MATERIALS SHALL BE LISTED IN THE SPECIFICATIONS. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING AGENCIES. WHERE APPLICABLE, MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS, INCLUDING, BUT NOT LIMITED TO, ANSI, NEMA, NFPA AND "UL" LISTED.
6. ALL CONDUIT SHALL HAVE A FULL CORD.
7. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERLOCKING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 AMP.
8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IBC, NEC AND ALL APPLICABLE CODES.
9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS.
10. ALL WALLS SHALL HAVE ENGRAVED LETTERING WHICH IS LOCATED ON THE EXTERIOR. RECEPTACLES SHALL HAVE SERRA WIP-8 LIT COVERLATES.

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG. COLOR CODED.
2. METER SOCKET, AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
3. CONDUIT:

- A. RIGID CONDUIT SHALL BE UL LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS, EXPOSED ON BUILDING EXTERIOR, RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE EXPLOSION PROTECTED WITH HUNTS WRAP PROCESS NO. 3.
- B. FLEXIBLE METALLIC CONDUIT SHALL BE "LULOK" OR MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "LULOK" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
- C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS PRIOR TO COMMENCEMENT OF WORK.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LETTERS WITH WHITE ON BLUE BACKGROUND LETTING (MINIMUM LETTER HEIGHT SHALL BE ONE FOURTH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER.
7. ALL ELECTRICAL SYSTEMS SHALL BE COMPLETE AND FULLY FUNCTIONING, RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND FINISHED CONDITION.
8. GROUNDING ELECTRODE SYSTEM.

A. PREPARATION

1. **SURFACE PREPARATION:** ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO **ENSURE** PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUND. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUND. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.

1. CONNECTIONS BETWEEN GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS).
2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE AGEQ AND GROUND ROD). MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON THE TIGHTNESS OF THE CONNECTIONS TO THE CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLER CRIMP TYPE. ALL CABLE CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.

GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUIV. OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.

GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD DRAWN SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON TITINGS UNLESS OTHERWISE NOTED.

- LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #54 BE OR EQUIVALENT

A.	535	NOM	DLO	54805BE
B.	262	NOM	DLO	54872BE
C.	#1/0	DLO		54852BE
D.	#4/0	THWN	AND BARE	54885BE
E.	#2/0	THWN		54852BE
F.	#2	THHN		54207BE
G.	#6	DLO		54204BE

2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO. 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

- ENDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH
A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2)
OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE
AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

(SINGLE MAST AND SELF SUPPORTING TOWERS)

- LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
GROUNDING: GROUND METAL POLES WITH A MINIMUM OF 12 AWG TINNED SOLID BARE COPPER CONDUCTOR CAWELDED TO TOWER BASE LATE.

(COAXIAL ANTENNA CABLE)

- ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT

2. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".

CABLE IDENTIFICATION
TO BROUPE EASY
IDENTIFICATION, ASK: **1-800-333-3333**

1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED)

2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE CONNECTED).

- USE ANDREW CABLE TIES (F14 27280) TO SECURE IDENTIFICATION TAGS. TESTING: LESSIE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE CORROSION SWEAT TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER/QUALIFIED PERSONNEL TO ASSIST WITH THE CORROSION SWEAT TESTS. THE CORROSION SWEAT TESTING IS COMPLETE. CONTRACTOR IS TO PROVIDE LESSIE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEAT TEST.



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UTILITY POLE

SHEET TITLE
GENERAL NOTES

GN-2
SHEET NUMBER



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UTILITY POLICE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

6.0

PLAN NOTES:

1. PLANS PREPARED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TOP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TOP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TOP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
2. DISTANCE CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
4. SHOULDER TAPERES SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
5. "A", "B", AND "C" SHOULD BE IN EXCESS OF 500' FOR ROAD SPEEDS 45 MPH OR HIGHER.

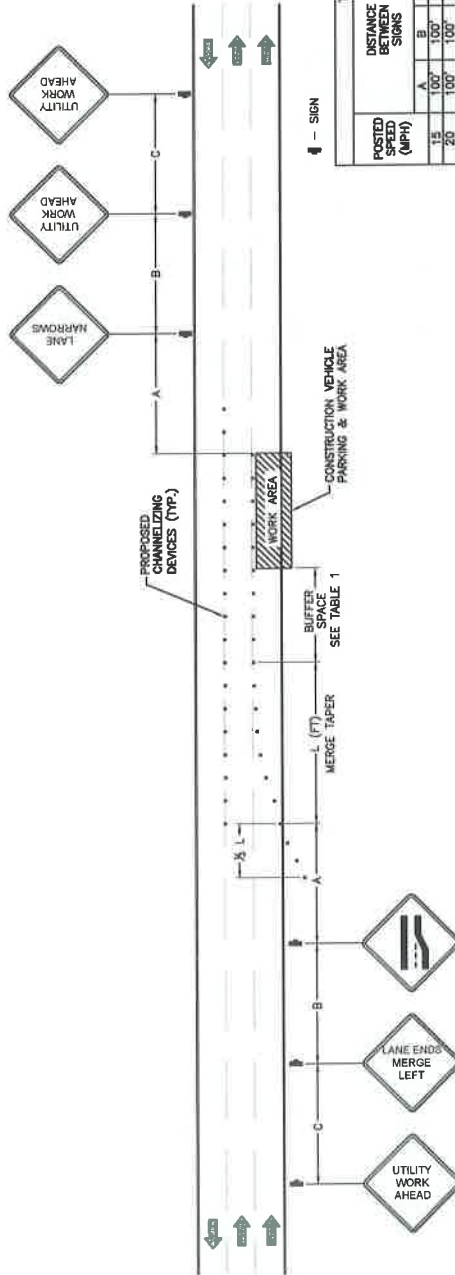


Table 3-4

TABLE 1						
POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER	
	A	B	C			
15	100'	100'	100'	45'	100'	
20	100'	100'	100'	60'	115'	
25	100'	100'	100'	125'	155'	
30	200'	200'	200'	150'	200'	
35	300'	300'	300'	180'	250'	
40	500'	500'	500'	320'	350'	
45	350'	350'	350'	540'	360'	
50	500'	500'	500'	600'	425'	
55	500'	500'	500'	560'	485'	
60	500'	500'	500'	500'	570'	
65	500'	500'	500'	720'	570'	
70	500'	500'	500'	760'	545'	

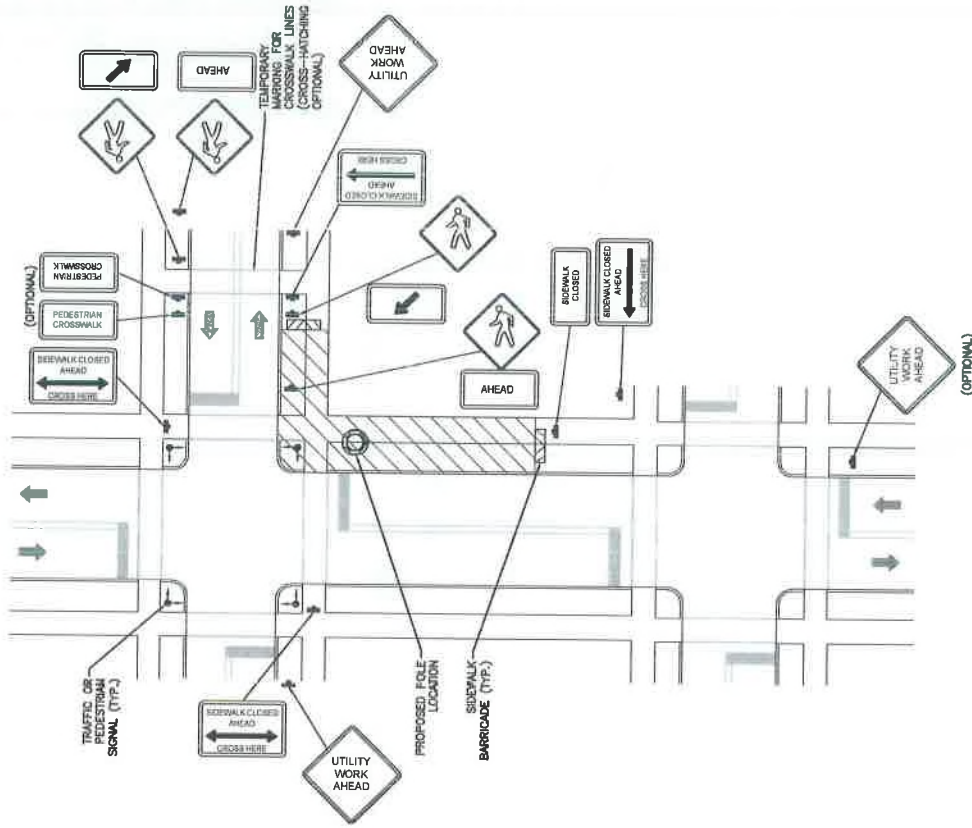
NOTES:

- ALL DISTANCES IN FEET UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
- CONTRACTOR TO VERIFY EXISTING SPEED LIMIT AND ACCESS.
- HOWEVER, CONSULT STATE DOT MANUAL FOR DISTANCES.
- ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET 4.2.
- PAPER LENGTHS SHOWN BASED ON 12" LANE WIDTH.

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET X.X.
E) TAPE LENGTHS SHOWN BASED ON 12' LANE WIDTH. SEE NOTE 1, SHEET X.X.

**TRAFFIC CONTROL PLAN -
LANE MERGE**

SCALE: NOT TO SCALE



TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES, SIGNALS, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC., SHALL BE USED AS NECESSARY. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES, AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART VI "TEMPORARY TRAFFIC CONTROL," AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS. SIGNS AND DEVICES SHALL BE PROVIDED BY THE APPROPRIATE AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE REDUCED FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE, ROADWAY WIDTH, AND OTHER ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE BLOTTED OR COVERED.
8. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLUMBLINE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 9:1V:1 HORIZONTAL SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS SHALL BE BACKFILLED AND PLACED ON A MINIMUM 4:1V:1 HORIZONTAL SLOPE. ALL EXCAVATED AREAS SHALL BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIERS SHALL BE INSTALLED AND SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE BUFFER SPACE SHALL BE PROTECTED BY A CONE OR CONES. A MINIMUM 12" X 20" SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER WHEN CHANNELIZATION DEVICES ARE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TRAILER CHANNELIZATION.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE EXTENDED WORK ZONE, THE CONTRACTOR SHALL PROVIDE TRAFFIC OUT OF THE EXTENDED WORK ZONE. A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
$$L = W \cdot S^2 / 900$$
 (40 MPH AND HIGHER) OR $L = W \cdot S$ (OVER 40 MPH).
WHERE: W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).

CITY OF WINTER HAVEN

Engineering Services Division
490 3rd Street N.W. 33881
Phone 863-291-5851

9FLB004614

USE PERMIT

Site Location: 28.012841-81.718489

Street Name 6th Street NE Date June 9, 2016
 Located between Avenue I SE, Street and Avenue J SE Street
 Permission Granted to Mobilitie, LLC Phone number - 727-512-5599
 For construction and maintenance of End user proposes to install equipment on a new pole within an existing ROW.
Scope of work: Install a new pole with proposed backhaul transport equipment.

This permit is subject to the following conditions:

1. The construction and maintenance of such utility shall not interfere with the property and the rights of a prior occupant.
2. All work shall be done in keeping with standards established by the Engineering Services Director and under the supervision of Mike Foster, City Construction Inspector, Phone (863) 291-5850, Cell (863) 287-2727.
3. All material and equipment shall be subject to inspection by a representative of the Engineering Services Director.
4. Construction shall be performed in a safe manner and in accordance with the regulations of OSHA, USDA and other applicable agencies. The City shall be relieved of all responsibilities for damages of any nature arising from this permit. Subject to the above terms and conditions, the permittee shall take such safety measures, including placing and display of caution signs, as good practice dictates in conduct of construction and maintenance work herein described.
5. The permittee shall provide for safe pedestrian traffic throughout the construction time. Where existing sidewalks and other walkways exist prior to this work, they or safe alternate trafficable ways, shall be maintained.
6. All city property shall be restored to its original condition to the satisfaction of the Engineering Services Director and/ or his authorized representative.
7. The applicant shall indemnify, defend, and hold harmless the City from and against any and all claims, suits, actions, judgments, demands, taxes, losses, costs, expenses, damages, and liability caused by, resulting from, or arising out of the negligent acts, errors, or omissions of the applicant, its officers, employees, agents, or representatives that may occur by reason of this construction.
8. The attached sketch covering details of this construction shall be made a part of this permit.
9. The applicant, at a minimum, shall obtain insurance coverage for specific risks and in such amounts and with insurers as determined acceptable by the City. Any such insurance coverage(s) required by the City shall represent the minimum amount of coverage required. The applicant, at its sole cost, shall obtain insurance coverage(s) as follows:
 - a. Workers' Compensation/Employer's Liability:
 - For each accident (\$5,000,000.00)
 - Disease – Policy Limit (\$5,000,000.00)
 - Disease – Each Employee (\$5,000,000.00)
 - b. Commercial General Liability ("CGL"):
 - For each occurrence (\$5,000,000.00)
 - General Aggregate (\$5,000,000.00)
 - Products/Completed Operations Aggregate (\$5,000,000.00)
 - Personal and Advertising Injury (\$5,000,000.00)
 - c. Business Automobile Policy:
 - Each occurrence and bodily injury and property damage liability combined (\$5,000,000.00)
10. It is expressly stipulated that this permit is a license for permissive use only and that placing of facility upon public property pursuant to this permit shall not operate to create or to vest any property in the permittee or his client.

Pursuant to section 337.403(1), Florida statutes, whenever necessary for the construction, repair, improvement maintenance, safe and efficient operation, alteration or relocation of all, or any portion of said Transportation Facility/City Property as determined by the Engineering Services Director, any or all utilities and appurtenances authorized here under or any shall be immediately removed from said Transportation Facility/City Property or reset or relocate thereon as requested by the Engineering Services Director and at the expense of the Permittee.

11. The permittee shall commence actual construction in good faith on TBD and shall complete the construction within 7 days. This permit shall be void if the work is not started within sixty (60) days from date of said permit.
12. Applicant declares that prior to filling out the application he has ascertained the location of all existing utilities, both aerial and underground. Applicant also declares that all other utilities within the area were notified and that he is including a notification copy with this permit application. List the name of the Utility, Date, and the authorized Contact person from each Utility that were contacted: Mobilite, LLC will send all required utility notification letters, and proof of such notification, when Mobilite's project to install utility poles within the City's rights-of-way has been approved by the City.
13. Notify the Engineering Services Division (863) 291-5851 a minimum of 48 hours prior to the commencement of construction. A SUNSHINE ONE number must be provided at this time. Failure to provide proper notification may result in the stoppage of work. **Notify the Engineering Services Division the day construction actually commences.**
14. If the applicant transfers or assigns its assets located within the City's right-of-way, the transferee or assignee shall be obligated to comply with the terms of this Use Permit and any and all applicable provisions of the WHC.
15. Nothing herein is intended to waive the City's sovereign immunity or the limits of its liability under Section 768.28 of the Florida Statutes regardless of whether such claims are based on contract, statute, tort, strict liability, product liability, negligence or otherwise.
16. **The use of missiles is limited and must be approved by the Engineering Services Director prior to Construction.**

Approved by: _____
(Engineering Services Director)

Submitted by: Michael Nuckols
(Applicant's Signature)

Date: _____

Michael Nuckols
(Applicant's name printed)

SUNSHINE ONE# _____

City of Winter Haven Engineering Services Division Permit # _____

Note: Attach Applicable Plans as Required

FL NETWORK
TRANSPORT, LLC



PROJECT NO:	ER600201
DRAWN BY:	T VIDAL
CHECKED BY:	L THRESEWITT

[illegible]

PRELIMINARY

TA90XSDQJA
9FLB004614
6TH ST SE &
AVENUE I SE
WINTER HAVEN, FL 33860
UTILITY POLE

SHEET TITLE

TITLE SHEET

0.0
SHEET NUMBER

DIG ALERT



TWO WORKING DAYS BEFORE YOU DIG

PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON A PROPOSED WOOD UTILITY POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON A PROPOSED WOOD UTILITY POLE

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX

SHEET NO.	SHEET TITLE
0.0	SITE SHEET
1.0	SITE PLAN & EXHIBIT PHOTO
2.0	POLE ELEVATIONS
2.1	POLE ELEVATIONS
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	ANTENNA & EQUIPMENT DETAILS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
6.0	GENERAL NOTES
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
6.0	TRAFFIC CONTROL PLAN
6.1	TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

ARCHITECT/ENGINEER

JACOBS ENGINEERING GROUP, INC.
5449 BELLS FERRY ROAD
ACWORTH, GA 30102
CONTACT: KARL KRATINA
PROJECT MANAGER
TEL: (878) 480-1416
FAX: (770) 701-2501

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



GENERAL NOTES

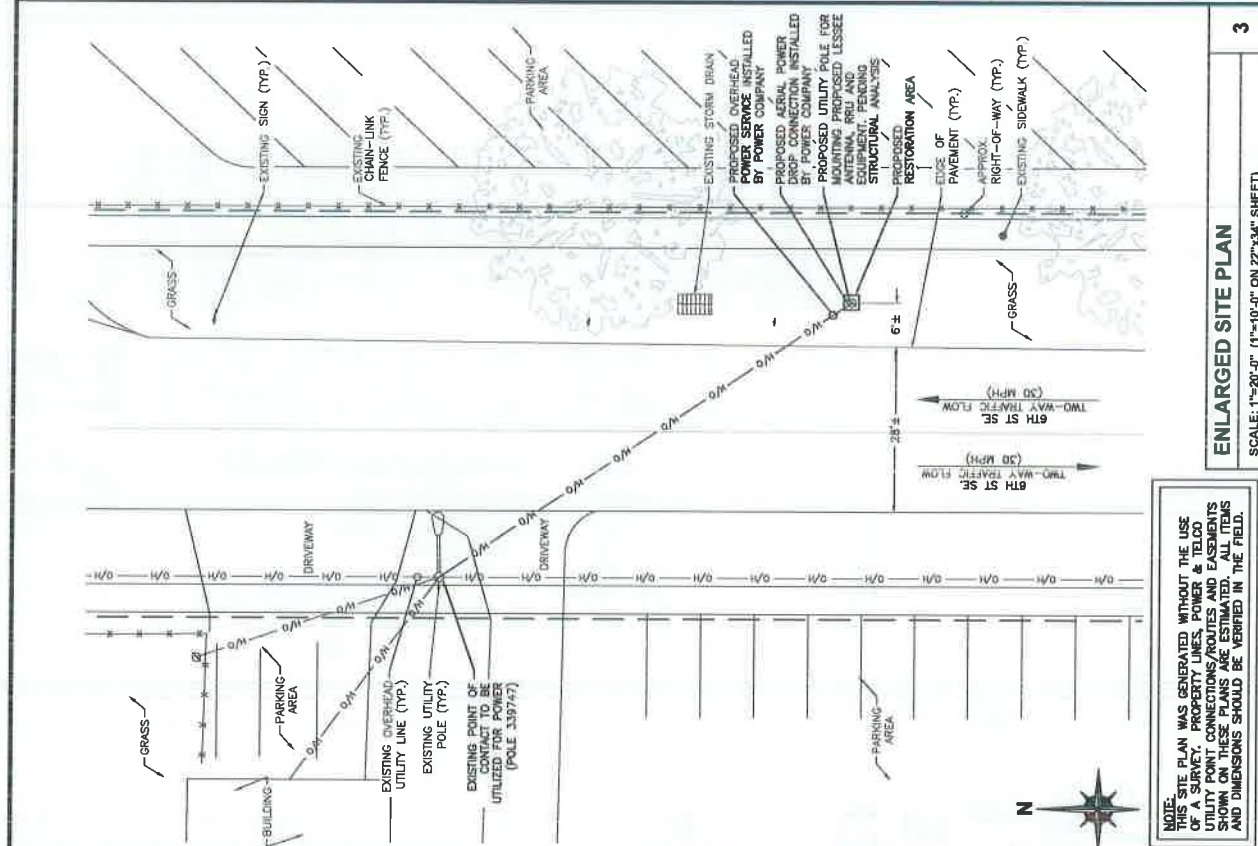
THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.


SITE INFORMATION

PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS ST:	6TH ST SE & AVENUE 1 SE
APPLICANT:	FL NETWORK TRANSPORT, LLC
APPLICANT ADDRESS:	925B PEACHTREE ST. NE, SUITE 710 ATLANTA, GA 30309 PHONE: (312) 638-5400
LATITUDE:	28° 0' 48.23" N (28.012841)
LONGITUDE:	81° 43' 8.56" W (-81.718468)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 171' AMSL
COUNTY:	FOLK COUNTY
JURISDICTION:	CITY OF WINTER HAVEN

BEFORE SCALING:

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



FL NETWORK TRANSPORT, LLC		PROJECT NO: 27650201 DRAWN BY: T VIDAL CHECKED BY: L. THREWITT	PRELIMINARY	TANDY SQUARE 6TH STREET & AVENUE I SE WINTER HAVEN, FL 33980 UTILITY POLE	SHEET TITLE SITE PLAN & EXHIBIT PHOTO	SHEET NUMBER 1.0
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FL NETWORK
TRANSPORT, LLC

PROJECT NO: ER500201

DRAWN BY: T. VIDAL

CHECKED BY: L. THREWITT

[illegible]

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY
PERSON UNLESS THEY ARE ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER, TO ALTER THIS DOCUMENT.

TA90XSDQJA
9FLB004614
6TH ST SE &
AVENUE I SE
WINTER HAVEN, FL 33908
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

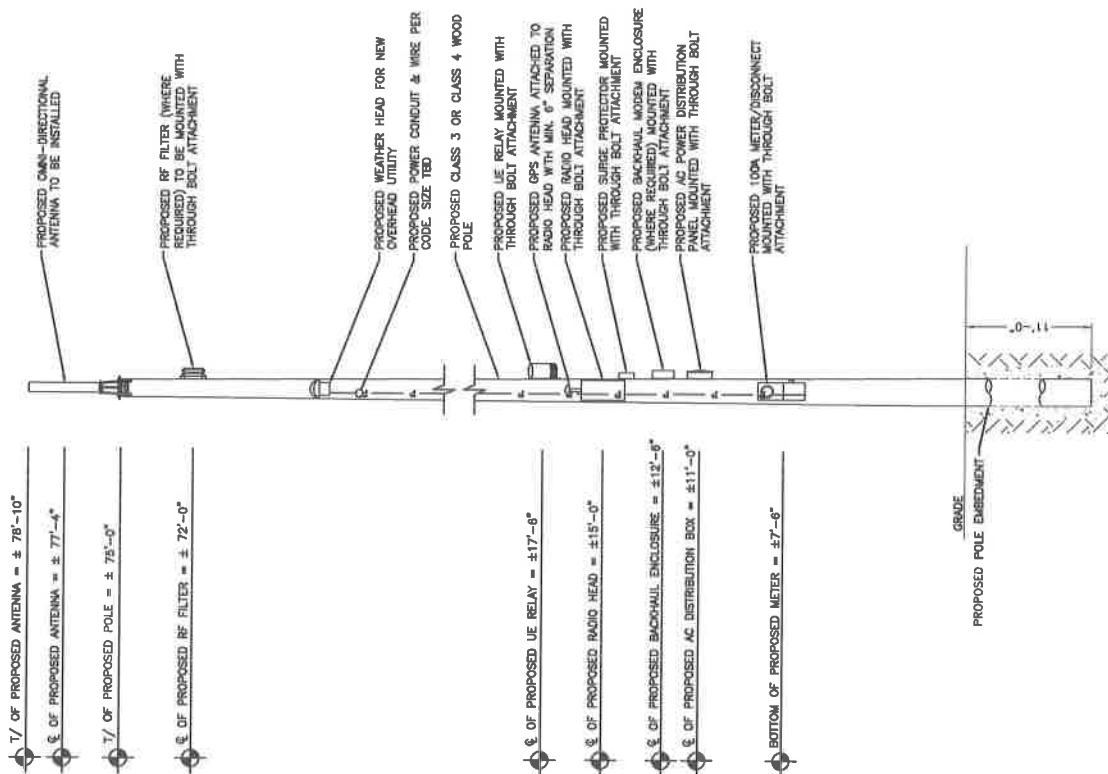
2.1

NOTE: PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (160k/m³)

BAND 41 (2500MHz) EQUIPMENT CHART			
QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.3" DIA	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.0"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIA	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.81"	14 LBS
1	REACT FILTER	13.6" X 8.1" X 2.4"	7.2 LBS
1	SURGE PROTECTOR	13.0" X 7.5" DIA	9.8 LBS
1	SURGE PROTECTOR	6.8" X 4.9" X 1.5"	1.5 LBS

**PROPOSED SIDE POLE ELEVATION**

SCALE: 1" = 5'

5

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

PART 1 - GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT REQUIRED DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH-UP PAINTING, TOUCH UP AND OVERLAP REPAIRS, AND RESTORE MARL EXPOSED ENSHES.

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.

- [illegible]

PART 1 - GENERAL

1. WORK INCLUDED: SEE SITE PLAN DESCRIPTIONS. IF APPLICABLE, LEASE AREA AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
2. QUALITY OF SOIL TO BE USED: A. APPLY SOIL STABILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED). B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED). C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, TO BE RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
3. SEQUENCING: A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION. B. CONSTRUCT TEMPORARY CONSTRUCTION AREA, DESIGNATED AREA TO BE APPROVED BY THE LOCAL MANAGER. C. APPLY SOIL STABILIZER PRIOR TO PLACING BASE MATERIALS. D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH. E. MAKE APPLICATIONS OF FINAL SURFACES. APPLY SOIL STABILIZER TO STONE SURFACES.
- 4.

A. BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD.

1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
3. LANDSCAPING WARRANTY STATEMENT

- A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND
- B. SOIL STABILIZATION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
- C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
- D. INSPECTION, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

1. MATERIALS

A. SOIL STERILIZER SHALL BE EPA-REGISTERED, PRE-EMERGENCE LIQUID:

- | | |
|--|---|
| TOTAL KILL
PRODUCT 910
EPA 10292-7
(313) 563-8000 | PHASAR CORPORATION
P.O. BOX 5123
DEARBORN, MI 48128 |
| AMBUSH HERBICIDE
EPA REGISTERED
(900) 529-4824 | FRAMAR INDUSTRIAL PRODUCTS
1435 MORRIS AVE.
UNION, NJ 07065 |

- B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) - ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
- C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 500X.

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION
2. PREPARATION

2. PREPARATION

 - A. CLEAR BRUSH AND DERIS FROM LEASE AREA AND UNDERGROUND UTILITY CABLES ARE REQUIRED FOR CONSTRUCTION.
 - B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DERIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
 - C. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL DOWNWARD TO A MINIMUM OF TWO FEET TO CONSOLIDATE COMPACTED AREAS WITH A STABILIZER MAT PRIOR TO PLACEMENT OF JOI OR BASE MATERIAL.
3. INSTALLATION

 - A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND PERMITS OFFICIALS.
 - B. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
 - C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
 - D. WHEN SEEDING AND FERTILIZING TO SURFACE CONDITIONS ARE WET, ENCOURAGE ROOTING. NAME AREAS TO BE SEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
 - E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
 - F. WHERE THERE IS SEDED AND UNLANDSCAPED AREA, BY WATERING UP TO THE POINT OF RELEASE FROM THE CONTRACT, CONTINUE TO NETWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPLETE SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND RETILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION

 - A. PROTECT SEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF PROTECTIVE NETTING SHALL BE USED TO PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING ADJACENT STREAMS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELAVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PROTECT THE RAILROAD RIGHT-OF-WAY FROM EROSION. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

GN-1

ELECTRICAL

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO BEGINNING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
 2. CONTRACTOR SHALL REVIEW THE ELECTRICAL DIAGRAMMATIC ONLY, VERIFY EXISTING LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
 3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH RACEWAY OR CONDUIT WITH A SYSTEM IDENTIFICATION TAG, THE TYPE OF TAGGING METHOD SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
 4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER AS THE EQUIPMENT AND MATERIALS TO BE REPLACED. ALL MATERIALS TO BE INSTALLED SHALL BE "U.L." WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NFP and "U.L." LISTED.
 5. PRE-CONSTRUCTION MEETING SHALL CONSIDER THE LIST OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
 6. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING A.L.I.C. CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.M.P. SHORT CIRCUIT CURRENT.
 7. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IBC, NEC AND ALL APPLICABLE CODES.
 8. ALL ELECTRICAL WIRING SHALL BE IDENTIFIED AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
 9. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SEVERA #10-8 LIFT COVERPLATES.
- SERVICE AND DISTRIBUTION
1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THIN OR THWN, WITH A MIN. SIZE OF #12 AWG. COLOR CODED.
 2. METER SOCKET AMPS, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MELBANK OR APPROVED EQUAL, AND SHALL BE UTILITY CONDUIT.
 3.
 - A. RIGID CONDUIT SHALL BE U.L. LABEL, GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE WALLS OR IN CONTACT WITH THE EARTH, UNDER PUBLIC HIGHWAYS, IN MASONRY OR IN CONTACT WITH CORROSION RESISTANT SURFACES.
 - B. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
 - C. IT SHALL BE GROUNDED TO THE SAME ELECTRICAL SYSTEM AS THE ELECTRICAL CONTRACTOR TO NOTIFY #11 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE DIGGING.
 4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT SERVICE TO THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
 5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE 1/8" MINIMUM HEIGHT 1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS NOT EXCEEDING 1/4".
 6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGRAVED BY THE CONTRACTOR SHALL BE PRESENTED TO THE ARCHITECT/ENGINEER FOR APPROVAL. SUBMIT REPORTS TO PROJECT MANAGER. CLEARLY PREPARED AND CORRECTLY INTERPRETED. ALL WORK SHALL BE COMPLETE AND UNCHANGED CONDITION.

SERVICE AND DISTRIBUTION

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THIN OR THINW, WITH A MIN. SIZE OF #12 AWG, COLOR CODED.
2. METER SOCKET AMPS, VOLTS, NUMBER OF PHASES SHALL BE NOTED ON THE COMPANY MANUFACTURED BY, MANUFACTURE OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
3.

CONDUR:

A. RIGID CONDUIT SHALL BE UL LABEL, GALVANIZED ZINC COATED WITH GALVANIZED STEEL, 1/2" OR 3/4" IN SIZE, AND ON RIGID CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROWWAYS, AND UNDER WALLS OR EXPOSED ON BUILDING EXTERIOR, RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2" LAPPED WRAPPED WITH HUNTS WRAP PROCESS N° 3.

B. WHERE PERMITTED BY CODE, FITTINGS SHALL BE USED TO JOIN RIGID CONDUIT. FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.

C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 611 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.

4. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE FOURTH INCH (1 1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL

5. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND GROUND POTENTIAL GRADIENTS TESTING BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. A SUMMARY TEST REPORTS TO PROJECT MANAGER, SHALL BE SUBMITTED TO THE PROJECT MANAGER, FOR REVIEW, SIGNATURE, AND DATE. COMPLETE AND UNCHANGED CONDITION.
- 6.

1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT, NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDING. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED TO THE CONTACT SURFACES.
 2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDING. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
- B. EXTERNAL CONNECTIONS
1. ALL BURIED CONNECTIONS SHALL BE MADE BY THE EXOTERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLES, WET S, PROTECTS, ETC. ALL CABLE TO GROUND CONNECTIONS SHALL BE MADE BY THE EXOTERMIC WELD PROCESS. ALL ROADS, GROUND ROADS, AND ALL OTHERS SHALL BE MADE BY THE EXOTERMIC WELD PROCESS. ALL MATERIALS USED (MOLDS, STANDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
 2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACE AND GROUND ROD). MECHANICAL CONNECTIONS THAT DEPEND SOLELY ON THE TIGHTNESS OF THE CONNECTION SHALL NOT BE USED. ALL EXOTERMIC SOLDIER SHALL NOT BE USED. ALL EXOTERMIC CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTERMIC WELDS.

- C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8" INCH DIAMETER X 10'-0" LONG, "CORROSIONLESS" OR APPROXIMATELY 90% ZINC COATED. THE END LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
- E. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD TWINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON THE DRAWINGS UNLESS OTHERWISE NOTED.
- F. LUGS: LUGS SHALL BE 2-HOLE, LONG BARREL STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS' SERIES #54-____ BE OR EQUIVALENT
- | | | |
|----|--------------------|---------|
| A. | 535 MCH DLO | 548098E |
| B. | 282 MCH DLO | 548728E |
| C. | #1/0 DLO | 548628E |
| D. | #4/0 THIN AND BARE | 548868E |
| E. | #2/0 THIN | 548628E |
| F. | #2 THIN | 542078E |
| G. | #6 DLO | 542058E |
2. WHEN THE DIRECTION OF THE CONDUCTORS MUST CHANGE, IT SHALL BE DONE GRADUALLY, THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE		MINIMUM BENDING RADIUS TO INSIDE EDGE	
NO. 6 AWG TO NO. 4 AWG		6 INCHES	
NO. 2 AWG TO NO. 1/0 AWG		8 INCHES	
NO. 2/0 AWG TO 4/0 AWG		12 INCHES	
250 MCM TO 750 MCM		24 INCHES	

- d. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

POLES, POSTS, AND STANDARDS
(SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL
- A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
- B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CAWELDED TO TOWER BASE PLATE.

TELECOMMUNICATIONS WIRING COMPONENTS
(COAXIAL ANTENNA CABLE)

1. GENERAL
A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
A. COAXIAL CABLE:
1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C.
2. COAXIAL CABLES SHALL BE USED FOR THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. USE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
3. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
4. ANTENNA AND COAXIAL CABLE GROUNDING
A. ALL ANTENNA AND COAXIAL CABLE KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
B. COAXIAL CABLE IDENTIFICATION
1. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLEING, PLASTIC TAPS SHALL BE USED AT THE FOLLOWING LOCATIONS:
a. LOCATION 1: AT THE END OF THE COAX NEAREST THE ANTENNA WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED.
b. LOCATION 2: AT THE END OF THE COAX NEAREST THE EQUIPMENT.
2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
3. USE ANDREW CABLE TIES (P/N# 27280) TO SECURE IDENTIFICATION TAGS.
B. ANTENNA IDENTIFICATION AND PRELIMINARY TESTING
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A QUALIFIED TESTING AGENCY TO PERFORM THE COAXIAL SYSTEM TESTS.
2. THE CONTRACTOR IS TO PROVIDE ONE CUMBER/QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A WRITTEN REPORT OF THE TEST RESULTS.
3. THE CONTRACTOR IS TO PROVIDE 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

[illegible]

PLAN NOTES:

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCTP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CERTIFICATIONS. THE FIRM PREPARING THE TCTP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION. (REQUIRED)

2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.

3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.

4. SHOULDER TAPERS SHOULD BE $1/3$ OF THE ON-STREET TAPER LENGTH.

5. MAINTAIN A MINIMUM LANE WIDTH OF 10".

6. THIS LAYOUT APPLIES TO SPEEDS 55 MPH OR LESS.

FL NETWORK
TRANSPORT, LLC



PROJECT NO:	ER600201
DRAWN BY:	T. VIDAL
CHECKED BY:	L. THREEWITT

[illegible]

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL COUNSELOR, TO MAKE THIS DOCUMENT

TA90XSDQJA
9FLB004614
6TH ST SE &
AVENUE I SE
WINTER HAVEN, FL
UTILITY POLE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

6.0

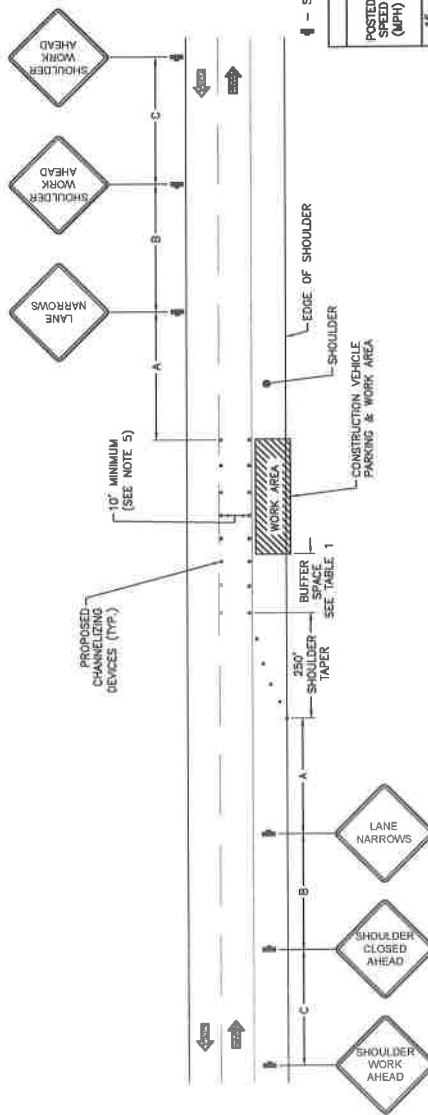
TABLE 1

TABLE 1					
POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER
	A	B	C		
15	100'	100'	100'	45'	100'
20	100'	100'	100'	60'	115'
25	100'	100'	100'	125'	135'
30	100'	100'	100'	150'	150'
35	200'	200'	200'	200'	200'
40	300'	300'	300'	245'	245'
45	350'	350'	350'	300'	300'
50	500'	500'	500'	540'	380'
55	500'	500'	500'	600'	425'
60	500'	500'	500'	650'	485'
65	500'	500'	500'	720'	570'
85	500'	500'	500'	750'	845'
NOTES:					
A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.					
B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.					
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.					
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION.					
E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH.					
F) SEE NOTE 18, SHEET 8-1.					

NOTES:

- A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
- B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
- C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
- D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET X.X.
- E) TAPE LENGTHS SHOWN BASED ON 12' LANE WIDTH.

SEE NOTE 18, SHEET 6.1.

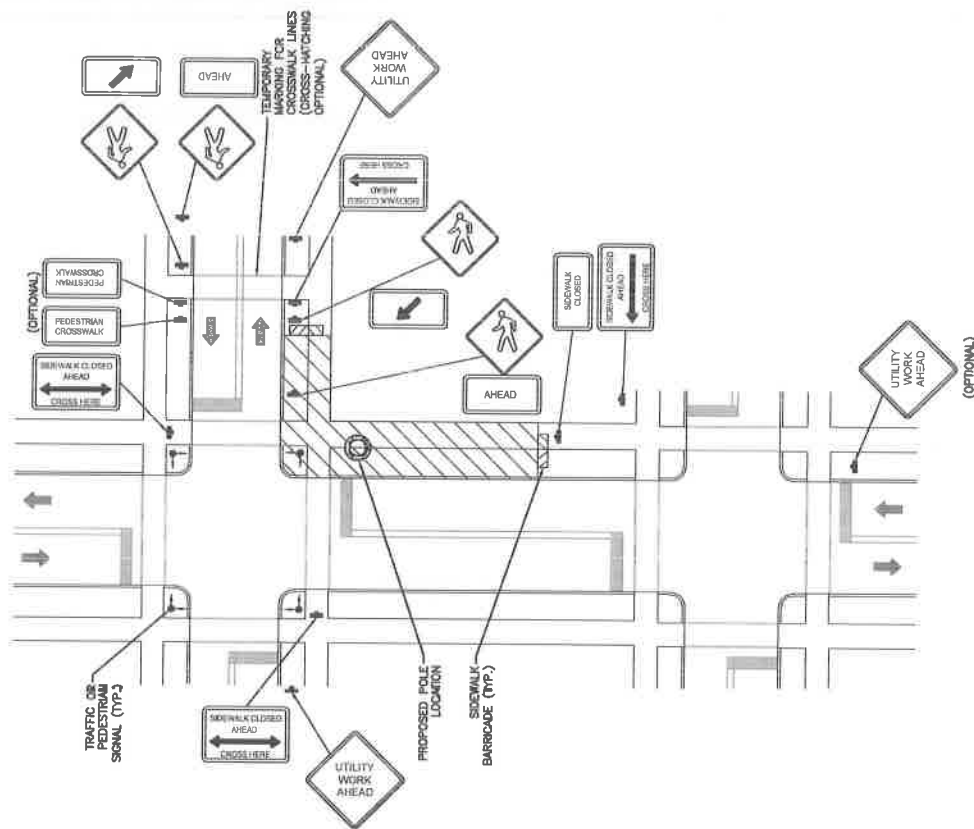


**TRAFFIC CONTROL PLAN -
SHOULDER WORK**

SCALE: NOT TO SCALE

ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES, SIGNALING DEVICES, AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICH IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRIERS, AND PLACEMENT OF WORKMEN ON PLANS, SHALL NOT BE PLACED WITHOUT AGENCY APPROVAL OF THE CLOSURES. SIGNS SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART VI "TEMPORARY TRAFFIC CONTROL," AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS. SIGNS SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL CURVES, GRADES, OBSTRUCTIONS, AND OTHER FACTORS THAT AFFECT TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE BAGED OR COVERED.
8. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR FLUORESCENT PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6" 15% SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS SHALL BE PROTECTED BY CONCRETE OR STEEL BRACING, OR PRECAST CONCRETE CURB BARRIERS. CONSTRUCTION SHALL BE COMPLETED TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE EQUIPPED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE REMOVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRIAGES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.5 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CLOSURES, AND NOT EXCEED A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CLOSURES.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICLES OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
$$L = W \times S / 90$$
 (40 MPH AND HIGHER) OR $L = W \times S$ (OVER 40 MPH),
WHERE W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).



PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY FOREIGN UNIONS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THE DOCUMENT.

TA90XSDQJA
9FLB004614
6TH ST SE &
AVENUE I SE
WINTER HAVEN, FL 33908
UTILITY POLE

SHEET TITLE

TYPICAL PEDESTRIAN /
WORKER SAFETY PLAN

SHEET NUMBER

5.1

TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

WINTER HAVEN

The Chain of Lakes City

October 6, 2016

Michael Nuckols- Via Certified US Mail
Mobilitie, LLC
3475 Piedmont Road, NE
Suite 1000
Atlanta, GA 30305

RE: Right-of-way use permits

Dear Mr. Nuckols:

On June 9, 2016, six Right-of-way Use Permits were submitted to the City of Winter Haven's Engineering Services Division for the installation of poles upon which communication infrastructure will be attached. The applications and corresponding locations covered by this letter include:

1. Application 9FLB004612- Presumably an existing 35-foot pole with a new antenna to be located at 28.004107°N and 81.716575°W (generally in front of 699 Cypress Gardens Blvd). This will need to be clarified however as noted below.
2. Application 9FLB004614- A new 75-foot pole and antenna to be located at 28.012841°N and 81.718489°W (generally in front of Winter Haven High School on Sixth Street, SE).
3. Application 9FLB004615- Presumably an existing 35-foot pole with a new antenna to be located at 28.030257°N and 81.712672°W (generally located at the NW corner of Avenue H, NE and Tenth Street, NE near Polk State College). This will need to be clarified as noted below.
4. Application 9FLX002223- A new 120-foot pole and antenna to be located at 28.025009°N and 81.728178°W (generally located on Avenue C, NW, north of 199 Avenue B, NW).
5. Application 9FLX002226- A new 120-foot pole and antenna to be located at 28.004937°N and 81.751479°W (generally located at the NE corner of Recker Highway and South Lake Ship Drive near Sertoma Park).
6. Application 9FLX002227- A new 120-foot pole and antenna to be located at 28.005889°N and 81.727988°W (generally located on Post Avenue, SW, north of 101 Cypress Gardens Blvd).

Upon receipt of the applications, staff conducted research on the proposed communication infrastructure as well as reviewed applicable sections of the Winter Haven Code of Ordinances. Upon completion of this review, staff concluded the following:

1. The proposed poles meet the definition of a communication tower contained in Chapter 21, Article IX, of the Winter Haven Code of Ordinances (WHC). A communication tower is defined as "any

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structure that is designed and constructed primarily for the purpose of supporting one (1) or more communication antenna for telephone, radio, and similar communication purposes, including self-supporting lattice towers, guyed towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common carrier towers, cellular telephone towers, camouflaged towers, and any support structures thereto.”

2. The proposed poles and related antennas are subject to the provisions of the City's Communication Tower and Communication Antenna Regulations contained in Chapter 21, Article III, Division 12 of the Winter Haven Code of Ordinances (WHC).
3. As the proposed poles are classified as communication towers, per Section 21-235, WHC, they are required to be sited in locations designated as Commercial, Industrial, or Institutional on the City's Future Land Use Map upon receiving Special Use Approval from the Winter Haven Planning Commission. As right-of-ways are not designated with Future Land Use designations, the Future Land Use of the adjoining parcel was used to determine compliance with this Section. Special Use Approvals have not been obtained for the submitted applications. Furthermore, the proposed pole contained in application 9FLX002226 is proposed to be adjacent to property designated as Recreation on the City's 2025 Future Land Use Map, and is not eligible for Special Use Approval.
4. Proposed antennas contained in applications 9FLB004612 and 9FLB004615 are presumed to be installed on existing utility poles. If that is the case they are considered a co-location onto an existing use. Please clarify the foregoing as there is some internal inconsistency/ambiguity in the applications submitted. Co-location onto an existing structure does not require Special Use Approval from the Planning Commission; however, notwithstanding the foregoing, the antenna proposed by application 9FLB004612 is located within a right-of-way owned and maintained by the Florida Department of Transportation (FDOT). You will need to receive approval from FDOT to install any proposed antenna within the FDOT right-of-way.
5. The proposed pole contained in application 9FLX002223 does not appear to meet the minimum 1,500-foot separation from an existing communication tower located near the intersection of Third Street, NW and Avenue B, NW as required by Section 21-235 (e) (2), Table 3.7, WHC.
6. In addition to Planning Commission approval, design standards and siting requirements contained in Sections 21-235(d), 21-235 (e), 21-235(f), and 21-235(g), WHC are required to be met. A review of each of the proposed sites found insufficient space to meet these requirements.

In summary, as stated in the above conclusions, four of the submitted applications referenced above, fail to comply with one or more of the requirements contained Section 21-235 of the Winter Haven Code of Ordinances and are denied. These applications are 9FLB004614, 9FLX002223, 9FLX002226, and 9FLX002227. Permit application 9FLB004612 cannot be approved by the City as we lack jurisdiction for this approval. Please contact FDOT regarding approval of this location.

Permit application 9FLB004615 falls under the City's jurisdiction and has been reviewed by the City's Engineering Services Division which offers the following comments:

1. We will need a copy of TECO's approval of the proposed antenna installation on their light pole(s).
2. We will need TECO's approval of the "structural evaluation" to determine if the subject pole has capacity to adequately support the equipment. See the note on sheet 2 of the plans.

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3. Remove the "Preliminary" stamp on all the plans.
4. Plan sheets 6.0 and 6.1 needs to reference FDOT Index 600 series.
5. Applicant shall provide proof of insurance as noted in item #9 of the permit application.
6. Please clarify if the proposed antenna will be mounted to an existing utility pole as indicated on Sheet Number 2.0 dated May 16, 2016, or on a new pole as indicated on the City of Winter Haven Use Permit application dated June 9, 2016. If the antenna is to be mounted to a new pole, this location will not meet the criteria for a new communication tower as contained in Section 21-235, WHC.

Please provide the clarifications regarding the two (2) noted applications referenced above.

Thank you and I look forward to hearing from you.

Sincerely,



Sean H. Byers, AICP
Senior Planner

cc: Cleveland Bain, Jr. NRE Permitting Manager (via e-mail -cbain@mobilitie.com)

RECEIVED
Boswell & Dunlap LLP

JAN - 3 2017

by FJM, Jr.

3475 Piedmont Road NE
Suite 1000
Atlanta, GA 30305

December 28, 2016

T. Michael Stavres
Interim City Manager
Winter Haven City Hall
451 Third Street NW
Winter Haven, FL 33881

RE: Proposed Mobilitie Communication Services Provider Poles located in Public Right-of-Way

Dear Mr. Stavres:

Thank you for the time you and your staff have spent reviewing Mobilitie's proposed utility poles in Winter Haven, Florida (the "City"). Pursuant to correspondence and conversations between you and Cleveland Bain, Permitting Manager, the City requested a letter explaining Mobilitie's legal right to occupy the City's rights-of-way. Mobilitie requests that it be treated like any other communications service provider. Pursuant to federal and state law it seeks to locate its infrastructure equipment in the public right-of-way.

Mobilitie is an authorized competitive local exchange services provider ("CLEC") regulated by the Florida Public Service Commission ("FPSC").¹ In particular, Mobilitie operates as a "carrier's carrier" using a hybrid transport network, utilizing wireless signals and a small amount of fiber, used for the backhaul of phone calls and "mini macro" cellular site service. In order for its essential service network to operate, Mobilitie must install and maintain certain poles and equipment at specific locations at minimum heights.

As a FPSC regulated CLEC, Mobilitie is authorized under United States and Florida state law to install its proposed poles in the City's right-of-way. Applicable law authorizes "providers of communications services" to utilize the public rights-of-way for the "placement and maintenance of communications facilities."² Mobilitie's authority derives directly from the Federal Telecommunications Act of 1996 ("1996 Act") and the various enactments by the Florida Legislature to implement the 1996 Act. The purpose of these laws was to remove barriers to entry and provide the rapid development of telecommunications competition so as to make advanced technologies universally available at affordable prices for consumers. The various federal and Florida legislative enactments use varying terms for these providers, services and facilities, including telephone, telecommunications, communications or utility.³ Irrespective of the terminology used, the City's actions must be consistent with the fundamental policy goal set forth in the 1996 Act, "[n]o State or local statute or regulation, or other State and local legal requirement, may prohibit or have the effect of prohibiting the ability of the entity to provide any interstate or intrastate telecommunications service."⁴

¹ FPSC originally granted Mobilitie a certificate for as an "Alternative Access Vendor," Order No. PSC-06-953-PAA-TA (November 15, 2006). All AAV certificates were converted to CLEC certificates by operation of law when Chapter 364 was amended in 2011 to eliminate the AAV designation. Fla. Stat. §364.02, Chapter 2011-36, Laws of Florida, Sections 30 and 33.

² Fla. Stat. § 337.401(3)(a).

³ Fla. Stat. § 337.401(1)(a).

⁴ 47 U.S.C. § 253(a).

Mobilitie acknowledges that Florida state law authorizes the City to regulate the placement and maintenance of utility facilities in its rights-of-way pursuant to its police power. Specifically, the City may “prescribe and enforce reasonable rules or regulations with reference to the placing and maintaining along, across, or on any road ... any electric transmission, telephone, telegraph, or other communications services⁵ lines; poles lines; poles ... or other structures referred to in this section as the ‘utility,’”⁶ – subject to the limitations imposed by federal law. Concurrently, the Florida Legislature recognizes “the unique circumstances applicable to providers of communications services, including ... the circumstances described in paragraph (e)” and explicitly expressed that “it is the intent of the Legislature that ... counties treat providers of communications services in a nondiscriminatory and competitively neutral manner when imposing rules or regulations governing the placement or maintenance of communications facilities in the public roads or rights-of-way.”⁷ The Florida Legislature even went so far as to acknowledge that “providers of communication services may provide similar services in a manner that requires the placement of facilities in municipal or county roads or rights-of-way.”⁸ The 1996 Act defines “telecommunications carriers” broadly to include “any provider of telecommunications services,”⁹ allowing no basis for discriminating among providers of functionally equivalent communications services, and terms such as telephone, telecommunications, or communication should be read interchangeably.

To the extent the City’s ordinances prohibit the placement of wireless communication monopoles of any type in the public right-of-way while allowing traditional landline telephone poles, the 1996 Act preempts such ordinances as not competitively neutral and as discriminatory among providers of functionally equivalent services. Under federal law, Mobilitie’s communication services poles cannot be prohibited as the City has done.

While the 1996 Act provides the broad public policy framework for open and fair telecommunications competition, state and local governments are tasked with the implementation of this mandate. Florida’s compliance with the 1996 Act is reflected in part under Fla. Stat. Section 337.401.¹⁰ In fact, nowhere in Section 337.401 did the Florida Legislature authorize the City to deny a “communication services provider” access to its rights-of-way. Mobilitie’s facilities provide “communication services,” the essence of its hybrid transport network. Indeed, earlier this year, the Florida Legislature further expanded the scope of access by adding the broad reference to “communication service lines” while clarifying who should bear the costs of utility relocation when it becomes necessary.¹¹

The phrase “communications service lines” is a more technologically neutral term reflective of the different types of facilities – copper wire, coax cable, fiber optic cable and microwave radio – that can be used as a communications pathway between two points. This is borne out by the language in Section 337.401 that requires a local government’s rules to be “generally applicable to *all providers* of communications services.”¹² This is based upon the Legislature’s recognition of the “unique circumstances applicable to the

⁵ See Fla. Stat. § 337.401(1)(a) (ascribing Chapter 202’s meaning for “communication services” to § 337.401); See Fla. Stat. § 202.11(1) (defining “communication services” as “the transmission, conveyance, or routing of voice, data, audio, or any other information or signals, including video services, to a point, or between or among points, by or through any electronic, radio, satellite, cable, optical, microwave, or other medium or method now in existence or hereinafter devised, regardless of protocol used for such transmission or conveyance”).

⁶ Fla. Stat. § 337.401(1)(a).

⁷ Fla. Stat. § 337.401(3)(a).

⁸ Fla. Stat. § 337.401(3)(e).

⁹ 47 U.S.C. § 153(51). See also 47 U.S.C. § 153(52)-(53).

¹⁰ *BellSouth Telecommunications, Inc. v. Town of Palm Beach*, 252 F. 3d 1169, 1177 (2001).

¹¹ §2, Chapter 2016-44, Laws of Florida.

¹² Fla. Stat. § 337.401(3)(a). (emphasis added).

providers of communication services,” including the federal limitation on the scope of a local government’s rules for the “placement and maintenance” of communications facilities in public rights-of-way and the requirement for nondiscriminatory treatment.”¹³

Consistent with the 1996 Act, Section 337.401 requires local government rules that govern communication equipment in roads or rights-of-way meet certain criteria. The rules must relate to the “*placement or maintenance*” of the equipment, the rules must be *reasonable* and nondiscriminatory, and the rules may “include *only those matters necessary to manage* the roads or rights-of-way.”¹⁴ This concept is further advanced by the legislative recognition that “[a]lthough similar communications services may be provided by different means, the state desires to treat providers of communications services in a nondiscriminatory manner.”¹⁵

The present version of Section 337.401 represents the most recent enactment of the Florida Legislature’s understanding the state’s obligations under the 1996 Act. Section 337.401 has been amended multiple times since the passage of the 1996 Act to keep up with the evolution in terminology and technology and to ensure the full and fair compliance with the intent of the 1996 act. For example, the 1997 version of Section 337.40 used the term “telephone company,”¹⁶ which in 1998 became “Telecommunications Company” to more closely reflect the language of the 1996 Act as well as 1995 changes to the FPSC’s statute to introduce local telecommunications services competition.¹⁷ In 2000, the Legislature substantially overhauled Section 337.401 to bring it explicitly into compliance with the 1996 Act:

Because federal and state law require the nondiscriminatory treatment of providers of telecommunication services and because of the desire to promote completion among providers of telecommunications services, it is the intent of the Legislature that municipalities and counties treat telecommunications companies in a nondiscriminatory and competitively neutral manner when imposing rules, or regulations governing the placement or maintenance of telecommunications facilities in the public roads or rights-of-way.¹⁸

In 2001, the Legislature made further refinements in the statute to reflect the “unique circumstances applicable to providers of communications services.”¹⁹ Reading the evolution of language in context with the present version of Section 337.401, it is clear that the communications services provided by Mobilitie fall well within the scope of the 1996 Act and Section 337.40 and that Mobilitie is lawfully entitled to place its facilities in the City’s rights-of-way. The transport monopolies involve microwave point to point facilities that carry telephone calls over spectrum authorized by the Federal Communications Commission (“FCC”). Failing to include Mobilitie’s communications services is anti-competitive and unlawfully discriminates against federally authorized and state mandated public rights-of-way usage.

To ensure competitively neutral treatment, the City cannot base its denial on the type of communications service facilities installed, nor can the City establish criteria that only one type of service provider’s equipment can meet. The City’s sole placement requirements need to be reasonable and tied directly to

¹³ *Id.*

¹⁴ Fla. Stat. § 337.401(3)(b). (emphasis added).

¹⁵ Fla. Stat. § 337.401(3)(e).

¹⁶ Fla. Stat. § 337.401(3), 1997.

¹⁷ Fla. Stat. § 337.401(3), 1998.

¹⁸ Fla. Stat. § 337.401(3)(a), 2000.

¹⁹ Fla. Stat. § 337.401(3)(a), 2001.

management of the right-of-way. With the broad re-write of Section 337.401 in 2000, the Legislature began to provide some definition as to exactly what such local use regulations may encompass:

(3)(a) Because federal and state law require the nondiscriminatory treatment of providers of telecommunications services and because of the desire to promote competition among providers of telecommunications services, it is the intent of the Legislature that municipalities and counties treat telecommunications companies in a nondiscriminatory and competitively neutral manner when imposing rules or regulations governing the placement or maintenance of telecommunications facilities in the public roads or rights-of-way. Rules or regulations imposed by a municipality or county relating to telecommunications companies placing or maintaining telecommunications facilities in its roads or rights-of-way must be generally applicable to all telecommunications companies and, notwithstanding any other law, may not require a telecommunications company to apply for or enter into an individual license, franchise, or other agreement with the municipality or county as a condition of placing or maintaining telecommunications facilities in its roads or rights-of-way. In addition to other reasonable rules or regulations that a municipality or county may adopt relating to the placement or maintenance of telecommunications facilities in its roads or rights-of-way under this subsection, a municipality or county may require a telecommunications company that places or seeks to place facilities in its roads or rights-of-way to register with the municipality or county and to provide the name of the registrant; the name, address, and telephone number of a contact person for the registrant; the number of the registrant's current certificate of authorization issued by the FPSC or the FCC, and proof of insurance or self-insuring status adequate to defend and cover claims.

(b) Each municipality and county retains the authority to regulate and manage municipal and county roads or rights-of-way in exercising its police power. Any rules or regulations adopted by a municipality or county which govern the occupation of its roads or rights-of-way by telecommunications companies must be related to placement or maintenance of facilities in such roads or rights-of-way, must be reasonable and nondiscriminatory, and may include only those matters necessary to manage the roads or rights-of-way of the municipality or county.²⁰

The fact that a county or municipality "may" require an FPSC or FCC certificate or authorization recognizes that not all authorized telecommunications services providers who can use the public rights-of-way may possess a state or federal license. The recognition of such non-traditional communication services providers permitted to use rights-of-way was further expanded in 2007 to include "the number of the registrant's current certificate of authorization issue by the FPSC, the FCC or the Department of State."²¹ The amendment to add the Department of State was made because of another statutory amendment that authorized cable television companies to obtain a statewide franchise by registering with the Department of State.²² Many of these cable television companies were also providing voice communications services utilizing unregulated voice over internet protocol ("VOIP"), and since the law must be technology neutral, VOIP providers also needed to be brought within the scope of the statute.

²⁰ Fla. Stat. § 337.401(3)(a)-(b). These provisions are reference herein as the three-prong test.

²¹ Fla. Stat. § 337.401(3)(a), (2007).

²² Fla. Stat. § 610.102 (2007).

Since 2000, the Legislature has tweaked the terminology, but the three-part test for how municipalities and counties may exercise their police powers to regulate and manage their roads and rights-of-way has remained. The current pertinent language on reasonable use regulations reads as follows:

Any rules or regulations adopted by a municipality or county which govern the occupation of its roads or rights-of-way by providers of communications services must be related to the placement or maintenance of facilities in such roads or rights-of-way, must be reasonable and nondiscriminatory, and may include only those matters necessary to manage the roads or rights-of-way of the municipality or county.²³

The local governments that have authorized the use of their rights-of-way for all communications services providers pursuant to the 1996 Act have generally done so consistent with the three-part test. Thus, for example, the cities of Jacksonville and Sanford both have rules regulating the “placement and maintenance” of communication facilities within a public right-of-way and confirm each city’s intent to be consistent with both the 1996 Act and Section 337.401.²⁴ Similarly, the cities of Orlando, Cape Coral, West Palm Beach, and Daytona Beach have rules authorizing communications providers to install communications facilities, including poles or towers, within their public rights-of-way subject to permitting and registration requirements.²⁵

Section 337.401 is a complete and comprehensive authorization for Mobilitie’s proposed communications services monopolies in the City’s rights-of-way pursuant to federal law. While Section 337.401 is an important statute for Mobilitie’s authority to use the City’s rights-of-way, other statutory pronouncement further authorize or support Mobilitie’s placement of its communications services poles in the City’s rights-of-way.

Section 362, Florida Statutes, grants individuals and “telephone companies”²⁶ the authority to erect poles, posts and other fixtures for “telephone purposes” on or beside any public road in Florida, falling within the statutory definition of a public right-of-way.²⁷ The only caveat to this authority is that the equipment may not obstruct or interfere with the common use of the roadway.²⁸ The term “telephone purposes” as used in this section is broad and encompasses not only equipment used to provide traditional landline-based telecommunications service but also equipment used to provide wireless communications services.

While traditional landline telephone service dominated two-way communications for almost a century, wireless telephone service grew exponentially starting in the 1990s and wireless handsets now significantly

²³ Fla. Stat. § 337.401(3)(b) (2016).

²⁴ § 711.402, Jacksonville Code of Ordinances; § 30-32, Sanford Code of Ordinances.

²⁵ § 58.849.5(a), Orlando Code of Ordinances; Chapter 25, Cape Coral Code of Ordinances; § 78.402, West Palm Beach Code of Ordinances; Chapter 10, Riviera Beach Code of Ordinances.

²⁶ The statute refers to companies that are “chartered” by a state. In this context, the term “chartered” means incorporated. A company’s charter is its organizing or establishment document, such as its articles of incorporation. To be “chartered” means to be established and recognized as an organization, such as a corporation. Chapter 611, Florida Statutes (1941), governing for-profit corporations, for example, included specific requirements for telephone company charters, including how such companies must hold and divide their stock and how they issue dividends. Section 623.05, Florida Statutes, provides that a charter provides evidence of a corporation’s existence. See also, Black’s Law Dictionary, defining the term “charter” to mean an act of a legislature creating a corporation. Fifth Edition (1979), p. 214.

²⁷ Section 177.031(16) of the Florida Statutes defines “right-of-way” to mean “land dedicated, deeded, used, or to be used for a street, alley, walkway, boulevard, drainage facility, access for ingress and egress, or other purpose by the public, certain designated individuals, or governing bodies.”

²⁸ The statute also requires that incorporated cities grant permission prior to installations within their jurisdictions, which is not relevant for purposes of this analysis.

now significantly outnumber landline access lines.²⁹ Recognizing that communication services are critically important to individuals and organizations alike, and that expansion of new and innovative services and infrastructure are necessary and in the public's best interests, the Legislature continues to support and encourage deployment of these new technologies consistent with principles of the 1996 Act.³⁰

As an example, the Legislature has for many decades defined "telephone lines" quite broadly, and not in a literal sense, to include:

Conduits, ducts, poles, wires, cables, cross-arms, receivers, transmitters, instruments, machines, appliances, instrumentalities and all devices, real estate, easements, apparatus, property and routes...to facilitate...telephonic communication.³¹

Toward the end of the twentieth century,³² the popular nomenclature for two-way communications services became more expansive, evolving from "telephones" and "telephonic communication" to more generic, all-encompassing terms "telecommunications"³³ or simply "communications."³⁴ Legislative and regulatory references also began to change. The title to Chapter 364 had for many years referred to "telephone" companies, but in 1990, the Legislature changed it to "telecommunications" companies.³⁵ As was discussed above, similar changes were made to Section 337.401 several years later. At the same time the Legislature changed the statutory reference to telecommunications companies, the Legislature further clarified that for purposes of the Florida Constitution, the term "telephone" includes "telecommunication."³⁶ As another example, the Legislature earlier this year revised Section 125.42, which complements Sections 337.401 and 362.01, by authorizing cities and counties to grant licenses to individuals and to private companies to install and operate telephone lines and "other communication services," *including communication towers*, within any city or county right-of-way.³⁷

In amending Section 125.42, to include "other communications services," the Legislature defined this term by reference to Section 202.11(1). Section 202.11(1), defines "Communications Services," as;

...the transmission, conveyance, or routing of voice, data, audio, video, or any other information or signals, including video services, to a point, or between or among points, by or through any electronic, radio, satellite, cable, optical, microwave, or other medium or method now in existence or hereafter devised, regardless of the protocol used for such transmission or conveyance. The term includes such transmission, conveyance or routing

²⁹ The Florida PSC now reports that there are approximately 3.3 million total wireline access lines in Florida as of the end of 2015 whereas there are an estimated 19.9 million wireless handsets in Florida with an additional 3.7 million cable Voice over Internet Protocol subscribers. Florida Public Service Commission, *Report on the Status of Competition in the Telecommunications Industry as of December 31, 2015*, at 1-2, 16-18, 21-25 (July 29, 2016).

³⁰ Fla. Stat. § 364.01(3), (2011 and 2016).

³¹ Fla. Stat. § 364.02 (1913); § 364.02 (1984).

³² In 1989, the Legislature required the Public Service Commission to evaluate the state's regulation of "telephone companies" and provide a detailed comprehensive report on the competitive change taking place within the "telecommunications industry." (Chapter 89-163, Laws of Florida).

³³ Given the broad scope of the PSC's jurisdiction which includes traditional landline telephone service as well as wireless communication service, the Legislature eventually changed the title of Chapter 364 from "Telegraph and Telephone Companies" to Telecommunications Carriers," and changed "telephonic communications" to "telecommunications."

³⁴ The Florida Public Service Commission clarifies in its rules that the terms "telecommunications company" and "telephone company" have the same meaning. Rule 26-4.003(6), Fla. Admin. Code (2016).

³⁵ Ch. 1990, Laws of Florida.

³⁶ Fla. Stat. § 364.381 (1990).

³⁷ Fla. Stat. § 125.42, (2016).

in which computer processing applications are used to act on the form, code or protocol of the content for purposes of transmission, conveyance, or routing without regard to whether such service is referred to as voice-over-Internet-protocol services or is classified by the Federal Communications Commission as enhanced or value-added. The term does not include:

(a) Information Services, (b) Installation or maintenance of wiring or equipment on a customer's premises. (c) The sale or rental of tangible personal property. (d) The sale of advertising, including, but not limited to, directory advertising. (e) Bad check charges. (f) Late payment charges. (g) Billing and collection services. (h) Internet access service, electronic mail service, electronic bulletin board service or similar online computer services.

This is a very broad definition that includes voice and other forms of information transmitted by any technology now available, including specifically radio and microwave, or hereafter devised.

Consistent with the statutory mandate for a broad interpretation of these statutes to track advances in technology, a Florida appellate court found that a telecommunications company was permitted to use a right-of-way in order to install buried fiber optic cable. The court found this was permitted use even though the fiber optic cable was not of the same type of overhead "wire" historically used by traditional telephone companies.³⁸

The provisions of Section 362.01 must be read in conjunction with Section 125.42. The authority granted to companies and individuals³⁹ by Section 362.01 to place communications equipment in public rights-of-way explicitly recognizes that municipal and county governments may appropriately use their police power to ensure such equipment does not create a danger or make the roadway unsafe to use. Similarly, Section 125.42, grants municipalities the authority to issue licenses approving the use of their rights-of-way and allows municipalities to impose conditions ensuring the equipment does not create obstructions or conditions which could be dangerous to the traveling public. Reading these sections together, the Legislature has established that a local government's authority to reject a request to locate communication equipment in a right-of-way is limited only to those situations where one would expect the proposed placement to create some type of danger for roadway users. The local government must rely on facts when it decides whether proposed equipment might pose a danger, and it must do so in a reasonable, non-arbitrary manner.⁴⁰

Given the history and the continuing evolution of two-way communications services, the language in Section 362.01 (1) authorizing "poles, wires, and other fixtures" for "telephone purposes" includes not only

³⁸ *Davis v. MCI Telecommunications Corp.*, 606 So. 2d 734 (Fla. 1st DCA 1992).

³⁹ In *Gulf Properties of Alabama, Inc. v. Southern Bell Tel. & Tel. Co.*, 346 So 2d 1085 (Fla. 1st DCA 1977), the court found in favor of a telephone company proposing to install its equipment over a subdivision developer which had reserved an exception when it filed the subdivision plans – because the subdivision developer was not presently operating or desirous of operating telephone company. The court made no mention of whether the Florida Public Service Commission regulated either entity. In addition, while Section 362.01, Florida Statutes, allows individuals to place equipment in public rights-of-way, Section 362.02, Florida Statutes, grants the power of eminent domain for communication equipment within railroad rights-of-way only to telegraph and telephone companies – not to individuals.

⁴⁰ *General Tel. Co. v. City of Bradenton*, 192 So. 2d 534 (2d DCA 1966). Fla. Stat. Ch. 362.01...gave plaintiff the right to install [equipment] subject to the qualification that the [equipment] did not obstruct or interfere with the common uses of the streets. Defendant [government] had introduced no evidence that plaintiff's [equipment] had obstructed or interfered with the use of the streets, that they constituted a hazard, or were unreasonable in nature or number.

traditional landline telephone service but also wireless communications services, including Mobilitie's infrastructure.⁴¹ A more narrow interpretation is not supported by, and is inconsistent with, the Legislature's intent to promote new communication technology and related infrastructure.

Mobilitie kindly requests the City to review our applications as it would review a communications services provider and promptly process our applications for new poles in the City right-of-way. Mobilitie understands that in order to access the public right-of-way it is required to compensate the local jurisdiction in the form of permitting fees and is prepared to pay any and all permitting fees required by Winter Haven. Mobilitie looks forward to working with the City and placing its utility infrastructure within its rights-of-way. We welcome a chance to work with the City in finding a solution that fits both of our needs in terms of infrastructure and a process to achieving permits. Cleveland Bain, Permitting Manager, would like to request a meeting with you and any other interested parties to discuss, in person, a site-by-site review of our proposed network. Cleveland can be reached at 407-280-4920, or via email at CBain@mobilitie.com. Should you have any questions, please do not hesitate to contact me via my mobile phone (678) 630-9823 or by e-mail at cbrown@mobilitie.com.

Sincerely,



Chris Brown
Government Relations Associate

cc: Frederick John Murphy, Jr. - City Attorney

⁴¹ See also *Nerbonne, N.V. v. Florida Power Corp.*, 692 So. 2d 928 (Fla 5th DCA 1997) where the court found that a right of easement given for "public road purposes" including authority to install power lines because historically roads had been used for not only transportation but also the delivery of communications and power. The court stated that this interpretation covering "adaptions of traditional highway uses" was appropriate "because of *changing technology*" (quoting *Fisher v. Golden Valley Elec. Assn.*, 658 P. 2d 127 (Alaska 1983). Explained by *City of Orlando v. MSD-Mattie, LLC.*, (Fla. 5th DCA 2005).